

ATARI INTERFACE

VOLUME 4
APR. 1992

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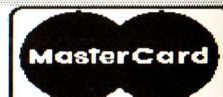
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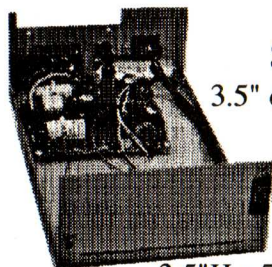
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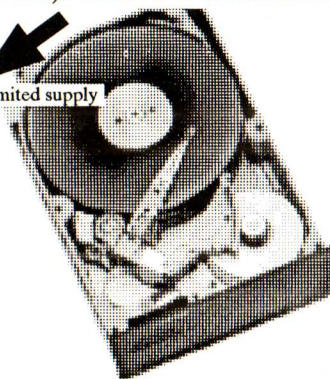
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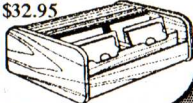
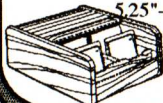
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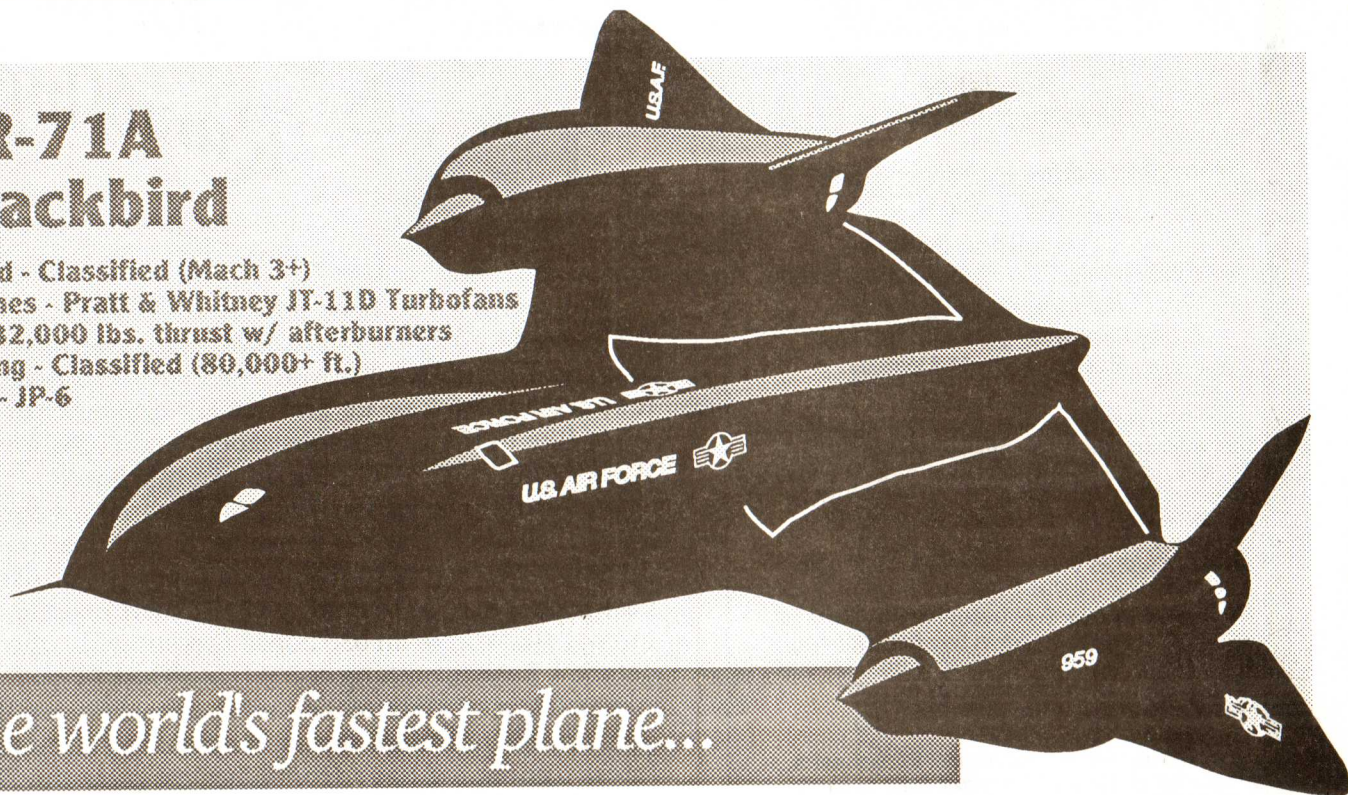
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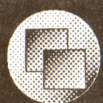
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Apparently, the firm we use to duplicate our ST disks made an error when setting up our job on the March ST disk. If your March ST disk has problems, just send it back to us and we'll replace it for you. We'd like to thank our subscribers and clubs for their patience and understanding during this fiasco.

In this issue is an ad from Fast Technology for their Tiny Turbo030. For the purpose of clarification (and fairness), we'd like to point out that figures used by Fast Technology in that ad compare their product (running at 40MHz) to an 030 board (presumably, the Gadgets SST Board) running at 33MHz. (The SST board can run using a 40MHz 68030, with considerably better benchmark numbers than a 33MHz SST.) Also, the latest figures we have from Gadgets puts the Dyna-Cadd Cup Test at 44, rather than the 48 listed in the Fast Technology ad.

This issue sets a new record. There are over 100 clubs now participating in *Atari Interface*—104 to be exact! Along with the addition of new clubs, we've added two more distributors (one in Canada and one in Australia) and our "regular" magazine distributor has placed us in an additional 250 Waldenbookstores! So, things keep looking up for AIM! Watch for even more clubs signing up in the coming months.

We will be exhibiting at the April Toronto (Ontario, Canada) show at the Skyline Hotel at the Toronto Airport on April 4-5. If you're planning to attend this show, please stop in at our booth and say hello.

Bill & Pattie Rayl

ATARI INTERFACE

Volume 4

Your Connection to the Atari User Community

April 1992

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A little "graphics wizardry" courtesy of CompuServe's Graphics Forums. CompuServe's GIF format brings 256 color graphics to nearly every computer platform. With some telecommunications packages, you can even view these graphics on-line!

SLEDGE 1992

5th Annual State of Sledge Report

What Really Happened to Practical Solutions?

Many people have talked about Practical Solutions closing up shop. The usual "low sales, high overhead" was cited as the cause of their demise.

Here's what really happened. Two years ago, we licensed our Cable-B-Gone technology to Practical Solutions (AIM—April, 1990) so they could build their cordless mouse.

They were so impressed with our line of over-the-edge, uh... cutting edge products, they wanted the rights to market our Nuclear Powered Anti-Pirate Device (NPAPD) to supplement their copy protection dongle. Practical Solutions was manufacturing the units in house and storing them in an adjacent warehouse.

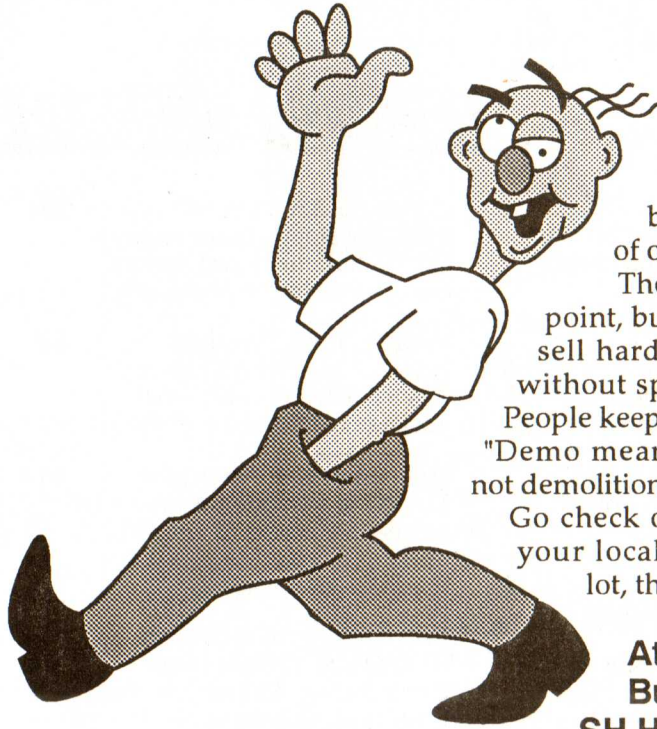
One day, a computer virus that had been unknowingly burned into the control ROMs tripped all the NPAPDs simultaneously. Oops!

Sledge at COMDEX

I continuously hear "Why don't I see the Sledge Hammer Hardware & Software product line at COMDEX?"

The answer is simple. Every year when we try to get a booth at COMDEX, the local police, fire, health and DPW departments ban us from the show claiming our equipment is too dangerous for the general public.

The DPW states they have neither the equipment nor the



manpower to clean up the so called "massive amount of rubble" left in the wake of our product demos.

The DPW has a valid point, but how else can we sell hardware at the show without spectacular demos? People keep whispering to me, "Demo means demonstration not demolition." I don't agree.

Go check out the "Demo" at your local new or used car lot, then decide.

Attempted Burglary at SH H&S

The 1991 year was an exciting one here at Sledge Hammer H&S. Less than a month after last year's update we had an attempted burglary at our research and development complex.

The scum-suckers apparently tried to make off with some high tech equipment. Fortunately, we had integrated our Nuclear Powered Anti-Pirate Devices into our security system.

I hear the mushroom cloud was awesome. We spent most of 1991 waiting for the radiation levels to drop low enough to stop melting the cleanup personnel.

The explosion caused almost a total loss. However, we did recover all of our Magnum monitors, completely intact and in working order. These babies can

Sledge Hammer

Michigan Atari Group
Not Usually Mentioned
(MAGNUM)

really take a beating—they were scattered across seven states and part of Canada.

We also recovered the platter from our Super Hammer Hard Drive.

After the clean up, it was time to file an insurance claim. We found our insurance company doesn't cover any losses if a flux capacitor is on the premises at the time of the loss (go figure out that one). After the insurance company talked it over with my .44 Magnum, they coughed up some money. I took the settlement and \$10 out my own pocket and bought a Lynx.

The Future of SH H&S

I haven't decided whether or not to resurrect Sledge Hammer H&S. It was easy competing against Atari's vaporware, but now some of their products are actually materializing. Have you any idea how difficult it is to compete against tangible products? We are looking into other product lines.

Since police brutality seems to be the in thing this year (Ah, good, my methods of law enforcement are catching on). We've come up with a modification for the new laser speed guns now available to the police.

The gun, in its original condition, is used to clock vehicle speed exactly the way current radar guns work. Instead of the gun shooting a high frequency radio wave pulse, the new laser guns use a light pulse emitted from a low power laser.

It's pretty boring to me, so we spiced it up. We've added two new settings on the laser gun: "Stun" and "Max." This gun can now help the officer make arrests. "Stun" is used on the ornery motorist who doesn't pull over, while "Max" is reserved for those choice moments when the officer really gets cheesed off.

Sledg-a-torial

Usually I don't get up on a soap box and preach. I let my .44 Magnum do it for me. Shooting and killing people hasn't gotten them to buy American, neither have other forms of mindless violence and brutality, so it's time to complain.

As I stated earlier, I decided to take the insurance settlement and buy a hand-held video-game unit. I found four to choose from: the Nintendo Game Boy, the Sega Game Gear, the NEC Turbo-Grafix Express and the Atari Lynx. Atari is the only American company of the four.

Ok, I bought a Lynx. On the bottom, it's labeled "Made in Taiwan." How can I buy American when we don't build anything here? How

can I support American companies if they don't even have the pride (or guts) to build and/or assemble their products here in America?

I do own an American car (there are still two or three items built here). I can't even buy an American TV. The only American company building a TV is Zenith, but their TVs are assembled in Mexico.

A thought to all you unemployed people out there belly-aching. I'm tired of your whining. Quit complaining, band together to form your own small businesses, use American materials and labor and get some home grown products onto the store shelves and into the showrooms for me to buy. Enough said.

Trust me...I know what I'm doing.

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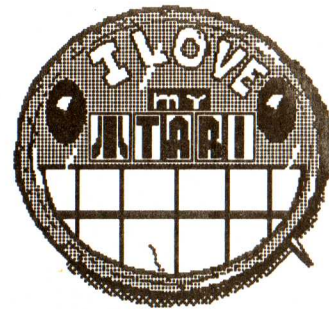
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Subliminal Messages

Subliminal Messages

Subliminal Messages



About every April you start hearing strange rumors. Some are exaggerations of the facts and some are total fabrications. The facts and rumors you are about to read should bring about awareness of a much greater conspiracy propagated by powers not yet determined.

When the 800 computer was designed, many factors were considered. Some of the most important were the human factors. The human factor considerations must have been extensive and well thought-out. The cartridge slot was placed where you could get at it. A switch was included so that when the top was opened, the computer would turn off to keep you from screwing up the cartridge.

The joystick ports were put in the front so you could easily reach them. The RESET key had protection tabs so it was harder to press by accident. The power switch was placed where you could get at it. All these must have been considered to create a computer that could easily be used by a human being.

There is one other aspect that no other computer has that is not only a human factor but would have its psychological effect—the sounds that are generated when data transfer occurs. While listening to these sounds, you can tell if everything is going well. I have used other computers without this feature and watched the disk spin for five minutes waiting to load a program off a bad disk. Not with the Atari. One bad beep and the problem can be corrected.

But (and this is where we get to the crux-of-the-bisket), since human factors were taken into account, the designers must have known about subliminal messages. These are messages that are not perceived by the conscious mind, only the subconscious. (I remember a Columbo episode where a message was spliced into a film and made a person go out and get a drink of water so the killer could shoot him!)

I believe that underneath all those beeping sounds, a message has been superimposed. This message simply states, "I Love My Atari."

I know you can't hear it, but I think it is there. Think of the effect on your subconscious mind, hearing this every time you boot up. Day after day, month after month, year after year, your subconscious receives "I Love My Atari." This would create a group of people so dedicated to these computers that even the thought of using another computer would create mental distress.

Changes in my life started me thinking there may be some truth to this. When I first got my computer, it was hooked up to a color television with sound. Those first few months were great. I would get home from work and turn on the computer. It was on until 3AM. I would not have gone to work except I knew someone had to pay for the next program!

Then came the new monochrome monitor. This one had no sound. Slowly, I became accustomed to daylight. I laughed, I sang, I even talked to other people. But still, I could not pass by an Atari computer store, and it was a year before I could sit in front of another computer and type.

Now, a color monitor with sound is sitting near my computer. I find myself again becoming introverted. Three months without sleep later, I knew there had to be a reason.

If you know of anyone showing a high degree of loyalty to their computer, see if you can get them to turn down the sound while booting up. Then observe the changes in personality. These people are easily recognizable.

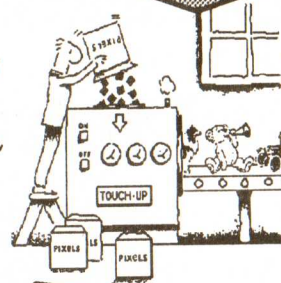
When showing them the high resolution graphics screen of the newer computers, they mumble, "I Love My Atari." Ask them if they have heard about the high clock speeds of other computers and they say, "I Love My Atari." Or, if you're their spouse, they say, "I Love you Dear, and my Atari."

Recordings have been made and are now being analyzed for these subliminal messages. As soon as proof of this can be found, many people will have much to answer for. But even after this conspiracy is proven, I think I will still love my Atari.

Kevin Packard
WNYAUG



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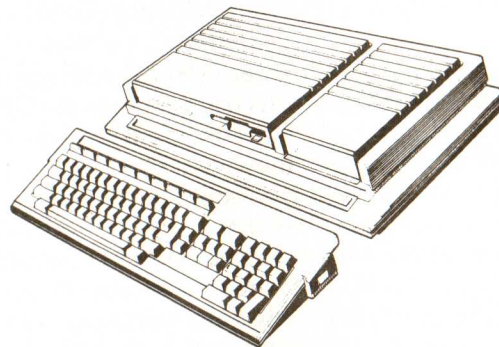
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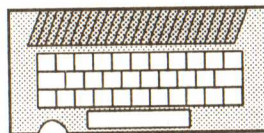
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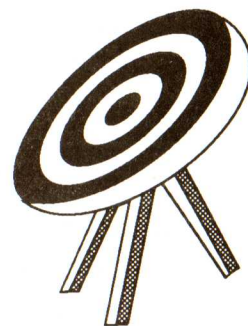
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David Plotkin
Contributing Editor

**Once you
have had a
taste of tele-
conferencing
with Atari
owners that
you will in
all likelihood
never meet
face-to-face...
you will
never want
to go back.**

I remember my first encounter with the more-or-less mysterious world of telecommunications. It was quite a few years ago, at a West Coast Computer Faire in San Francisco. GENie (General Electric's "online service," a nationwide bulletin board) had a huge booth where they were showing the wonders of what you could do on GENie.

I wandered into the booth for a reason that has since slipped my mind (since I had absolutely no interest in telecommunications) and was instantly cornered by Darlah Pine—one of the best known of GENie's SysOps (system operators—the folks who take care of the bulletin board). She began to expound on the neat stuff you could do on GENie. I remember my comment at the time: "I'll never spend my own money to join a BBS." She just smiled and walked away.

Because, you see, in those days, the nationwide BBSes (bulletin board systems) were expensive. Not only was there the cost of what was usually a long-distance phone call, but the system itself charged something like \$18 per hour just to be logged on. What with weekly conferences to discuss life with other Atarians, electronic mail and literally thousands of neat files you could download, it didn't take very long to run up one heck of a bill.

Remember too, that 300 baud modems were the fastest things going in those days, so downloading a good sized file could literally take hours. My word, it was often cheaper to go out and buy the file from someone or to get a commercial version of the same thing.

There was the matter of hardware costs as well. Modems cost between \$100 and \$200 for 300 baud, \$400 to \$500 for 1200 baud—and the higher speed was only good if you could find someone else who also had one of those fairly rare 1200 baud modems. Certainly the

online services charged more money if you logged on at 1200 baud.

And it wasn't just the cost of telecommunications that put a damper on things, either. Telecommunications has its own language—baud, stop bits, parity and other such nonsense. Further, you couldn't safely ignore any of this because it was all necessary if you hoped to have a prayer of actually receiving or sending a file to someone.

Significant time to learn the idiosyncrasies of telecommunications and to experiment was needed. Often, the only way to get something to work was to try a variety of different things until something worked—then write down the procedure for the next time.

Better with Age

As the years have progressed, things have gotten quite a bit easier. A variety of factors have brought the cost of telecommunicating down considerably.

One change was a reduction in cost of the popular national services. GENie, for example, dropped its fee to \$6 per hour during off-peak hours. For a flat \$4.95 per month, you can use the "Basic" services—such as e-mail, without the hourly fee. Delphi has a similar system, although I'm not sure of the details—my account on Delphi is picked up by someone else that I write for, and I haven't inquired into the details. CompuServe has recently announced a Basic service plan of their own as well.

I suspect competition for the telecommunication dollar has helped. IBM and Sears joined forces to provide Prodigy. With the massive marketing muscle of these two companies, it has done quite well. It is very inexpensive because part of the cost is picked up by advertisers—across the bottom of your screen, advertising messages scroll by. These can be obtrusive, but it does keep the cost down.

Recently, Prodigy has been the center of a tempest because certain private messages have allegedly been censored by Prodigy. Their rationale? It's their system, and they can do what they like. Which is hard to argue with.

Another recent arrival is America Online. It started out strictly for Apple and Mac users (I got on using Spectre) but has since expanded. It is also very reasonably priced.

Another blow to the difficulties of telecommunications is the steep drop in modem prices. Modems allow digital data from your computer to travel over phone lines that are actually designed for analog (voice) data. Like most other things in the computer world, their price has fallen.

300-baud modems don't even exist anymore, and 1200-baud modems are around \$50-\$100. 2400 baud modems are around \$100-\$150 if you shop around, and 9600 baud modems are even now falling into the range of affordability. The faster, cheaper modems have made using BBSes more affordable by cutting down on the amount of time you need to be logged on to get your work done.

Finally, telecommunications software has gotten much better. Not only can many BBSes detect your communications parameters and adjust, but point-and-click interfaces have made it possible to simply follow a set of instructions (e.g. set 7 bits, 1 stop bit, even parity, Xmodem 128 byte blocks) by clicking on a set of buttons. Anyone can do this, without having to understand anything about the terms.

In the Atari ST world, Flash, Interlink and STalker

all have strong followings, though I would venture that Flash is the most popular by virtue of having been around the longest—although it is no longer supported since Antic Software went out of existence. [Ed: Flash II is currently in beta testing and will be released by MissionWare Software soon.]

Since telecommunications has gotten so much easier and cheaper, should you consider getting involved? You bet. Once you have had a taste of teleconferencing with Atari owners that you will in all likelihood never meet face-to-face, benefitting from their experience, offering others help they would never have gotten otherwise, and "meeting" luminaries like Dave Small, Jim Allen, Charles Johnson, John Eidsvoog, Nathan Potechin, Bob Brodie, John Townsend, Sam Tramiel and many others, you will never want to go back.

The benefit, you see, is that you will no longer be cut off from others who share your interests, even if the nearest Atari dealer (it's hard to type that without smiling) is 500 miles away. If you are having trouble with some software, or just need advice, you can post a message in one of the dedicated areas on an online service and there will more than likely be an answer the next day. And, you can do this even if it is 2AM—you certainly can't call a company's software support line (if there *IS* one) at that time.

So, telecommunications can become your gateway to knowledge and help. As CompuServe (the biggest of the online services) says in their ads: *Don't be a solitary Atari. See you online!*

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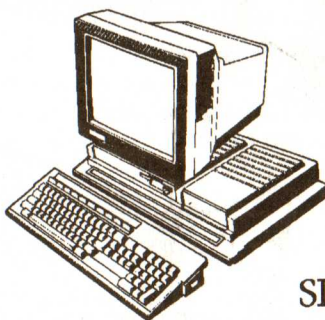
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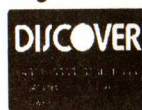
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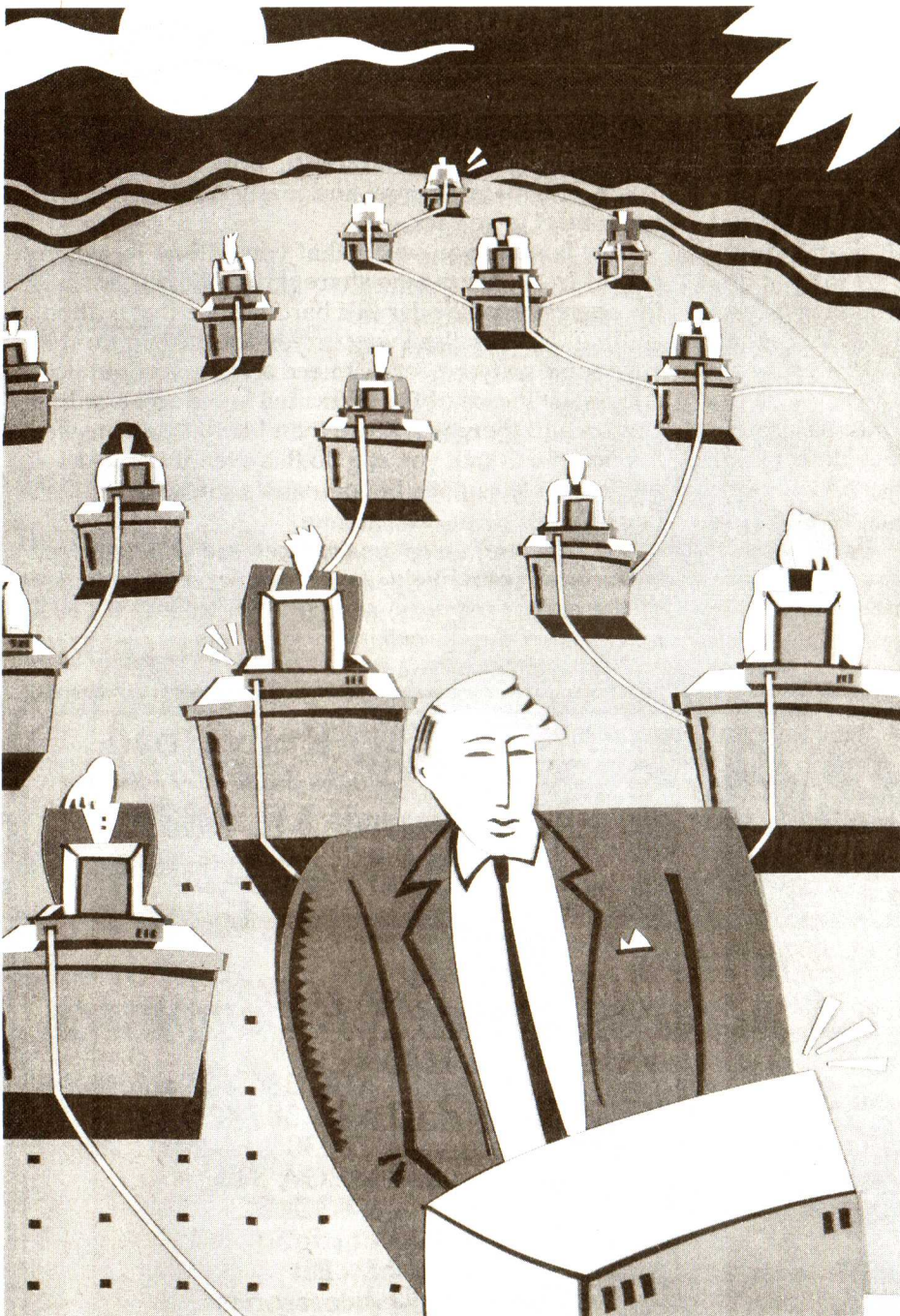
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[Ron Luks is the manager of the Atari Forums on CompuServe and is a long-time supporter of Atari computers.]

AIM: Howdy, Ron!

Ron Luks: Hiya.

AIM: Ron, can you explain for our readers what CompuServe is? I'm sure many are familiar with a local BBS, but what all does CIS offer?

Luks: CompuServe is an international commercial information network with thousands of local nodes that members can call into to access a wide range of informational and entertainment services. The CIS Forums are among the most popular services offered on the network. At last count, there were over 300 forums on CompuServe, including the five Atari-related forums.

AIM: And these forums are places where users can chat with each other and download files? Are there other services CIS has?

Luks: The Forums are composed of 3 areas: Messages bases (18 per forum), data libraries for downloading/uploading files and CO (conference) rooms for interactive communications.

The CIS forums can usually support up to 300 simultaneous users, although typically there are less online at any time. In some circumstances, CIS can set up an Electronic Convention center (an expanded CO) that can accommodate up to 600 simultaneous users.

AIM: Wow! That's a lot of people!

Luks: CIS uses over 40 networked mainframe computers for the information service. Our other online services include a comprehensive EMAIL facility that is connected to the forums (You can send EMAIL from inside a forum), FAX facilities, hardcopy US-Mail, sending of binary files of up to 512K and mass mailing and distribution features (just added). CIS has the usual assortment of newswires, weather, stock quotes, online games, an online encyclopedia, etc. There are over 500 products available online.

AIM: For example...if someone wanted to find out what the price of Atari Stock was today, how would he or she do that on CIS?

Luks: That's easy. Stock quotes are available from almost everywhere on the service. Inside a Forum, for example, just type the QUOTE command and you

An Interview with CompuServe's Ron Luks

Patricia Snyder-Rayl

will be prompted to enter the stock symbol—ATC in this case.

AIM: There's a lot here. Now that we've touched on the basics of what CIS has to offer, I understand there's a basic fee structure. Can you tell us more about that?

Luks: Historically, CIS has charged a per-hour fee to access the service. This fee varies with the baud rate (higher speeds mean higher per hour fees, although they are more economical when you measure usage by the amount of info sent over the modem). Recently, CIS took some of its most popular basic services and made them available for a flat-rate monthly fee. You can get a list of these services with the command GO NEWBASIC. Other areas not included in the BASIC services plan are available at the usual hourly connect rates. There are ongoing discussions about putting together other flat rate packages, but I don't have any more info on these at this time.

AIM: If such a flat rate package were put together, would it include the Atari Forums?

Luks: I'd very much like to see a flat rate package plan available for the Atari Forums, and that's one of the things we're working on. That's all I can say about this at this time.

One important point about the flat rate plans: They are options for the member to choose or refuse. No users are obligated to accept a flat rate plan if they don't feel it is to their advantage. CIS is sensitive to the fact that everyone uses the service differently.

Older members can elect to adopt the flat rate plan if they want, and new members can reject it if they don't want it. My understanding is that future plans will work the same way.

We have over 925,000 members worldwide now. (That's 925,000 accounts. CIS does not use the accounting method used by some other services whereby they multiply their actual accounts by a figure like 1.6 users per account to come up with inflated membership totals.)

CIS is rapidly expanding access in Europe, the UK and Australia. At the present time, we are adding local nodes in those countries and significantly reducing hourly surcharges. For example, in certain parts of the UK now, members can log onto CIS at the same rates as US members during non-prime hours. There is a small prime time surcharge (that is also getting reduced). USA and Canadian members don't have to worry about prime time versus non-prime time rates. We don't charge a surcharge just because someone wants to use the service during the business day.

AIM: Does this mean people calling in to the Atari Forums from the US can trade messages and even downloads with Atarians all over the globe?

Luks: Exactly right. In fact, we've opened a section in AtariArts called "Atari International," and we have many members logging on from Germany and the UK, including the general manager of Atari UK, Bob Katz. We are receiving a lot of new uploads from overseas lately.

AIM: Do you have any figures on the number of people who use the Atari forums?

Luks: I'm not allowed to go into too much detail about the demographics of the forum users, but I will say that we have over 30,000 active members in the Atari forums. And this figure has been increasing lately as we expand our European access.

AIM: That's great! I believe the CIS Atari forums have been around on CIS for a long time. Can you tell me how long?

Luks: I'm proud to say we are celebrating the 10th anniversary of the Atari forums on CIS. The original SIG*ATARI for 8-bit users opened 10 years ago.

AIM: Ten years! If you started with one forum, what has the Atari support grown to? You said five forums? What are they?

Luks: Right now, we have the original Atari 8-bit forum (ATARI8) which covers the 8-bit classic line and has a newly expanded section for the Lynx game machine. We have Atari Arts (ATARIARTS) and Atari Productivity (ATARIPRO) for the ST/STe/TT line. AtariArts covers games, graphics, MIDI, news and online magazines like ST-Report and Z*Net Online. Atari Pro covers utilities, applications, hardware, telecommunications, etc.

The AtariVendor forum (ATARIVEN) is a different type of forum where the main software and hardware vendors in the Atari community maintain their own message sections and libraries. The list of vendor areas

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And, finally, we have the Portfolio forum (APORTFOLIO) which is the official support site for the Portfolio line.

AIM: *Didn't you just have a "marathon" in the Portfolio forum? What was that about, and how did it go?*

Luks: The Port-a-Thon was a 24-hour online marathon where forum sysops and Atari staff members were available around the clock in the CO to answer questions and provide help to Portfolio owners. We gave away over 80 prizes during the Port-a-Thon and had members logging on from all corners of the globe. I'd say it was a huge success. They are already after me to do it again, but I need a rest. I spent 22 hours at the keyboard, and after awhile, my eyes started to cross. (heh heh)

AIM: *Was anyone else there for the full 24 hours?*

Luks: Don Thomas, the Portfolio Product Manager from Atari made it the full 24 hours. Other Atari staff participating were Dan McNamee, J. Patton, Mike Fulton, Bruce Coleman and Carl and Gail Bacani.

AIM: *I understand there's a discussion about networking STs together in the ATARIPRO forum. Can you explain the topic there?*

Luks: Sure. I admit I have a big personal interest in

this subject, which is why we opened the section about a month ago. (By the way, we're always open to members' suggestions for creating new sections and topics.)

My wife recently upgraded her PC to a 1-gigabyte hard drive, and her system also has a big tape backup, a CD-ROM player, a laser printer, etc. Since we have two offices in our home, I wanted to find a way to share her expensive PC peripherals with my Atari system. Since I didn't know where to begin with the task, I opened the NETWORKING section and asked our expert members for help. It turns out that I wasn't alone in wanting to hook up an Atari to a PC system to share peripherals. There was a huge amount of interest in the idea.

Most of the networking systems for the Atari were available in Europe with little information available in the States. Fortunately, with our expanded European access, many folks from the UK and Germany joined the discussion, and we've all learned a lot about what the Atari can and cannot do in this regard. The discussions are still going strong.

AIM: *This sounds like a perfect example of what online information services are all about.*

Luks: Exactly!

AIM: *Since you mentioned your wife, can you tell us more about yourself and your family? How did you get involved in computers (Atari specifically)?*

Luks: I bought my first Atari 800 at the end of 1979

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because I was hooked on the Star Raiders game. The store sold me a modem and said that when I get bored playing games, I should try calling BBSes in New York City. I stumbled onto CompuServe, and when I couldn't find an Atari-specific area, petitioned CIS to open one. In 1981 they called me, and asked me if I wanted to run one. At the time, I was working on Wall Street, and computers were just a hobby. In 1983, I left the stock exchange and turned to computers full time.

I met my wife, Dawn, through a mutual friend in 1985-86, and she started on CIS with her own forum (the Consumer Electronics Forum). Although we both work on CIS, we didn't meet on CIS.

AIM: So, she was already involved with computers when you met? She didn't feel like a "computer widow" like many people? (grin)

Luks: Dawn was a Consumer Electronics journalist. When we met, she was working as an editor at Hearst Electronic publications for Neil Shapiro, the CIS Apple/Mac SysOp. I was having lunch with Neil one day, and when I went to his office to meet him, Dawn was there and he introduced us. When she walked out of the room, I told Neil I was going to marry her....

And two years later, I did. (grin)

AIM: And you have a little girl, right?

Luks: We have a 10-month-old baby daughter, Jennifer.

AIM: Back to the Atari forums...the APortfolio area is an official support area for Atari Corp. on CIS, but the ST and 8-bit (Classic) areas aren't. How has that affected the forums over the years (if at all)?

Luks: It has affected the forums. Obviously, when we first opened, CIS was the only information network that had an Atari presence. When GENie opened, they were designated the official support area by Atari, and they offered much lower rates. So, I can't say which factor was the main reason behind our drop in activity initially. I will say that, with or without Atari Corp's "official sanction," we have enjoyed support from various Atari personnel over the years. At times, the forums and Atari Corp. have been "at odds" with each other, but I'm happy to say that relations are better now than they have been since 1985.

We're very proud that we represent the best interests of our members first and foremost. Without going into specific episodes from the past, I think Atari Corp. realizes that what is best for Atari users will ultimately be what's best for Atari Corp. This change in attitude is something I've noticed in the past year or so, and I think it's a great step. As an Atari customer support facility, I think the forums provide a valuable service to both Atari customers and Atari Corp. We have a number of joint promotions in the works for the months ahead.

Let's face it, the Atari marketplace now is so small, it's no longer a matter of "users vs. the company." If Atari is going to stay in the computer business, we all better be working toward the same goals.

AIM: Well, to wrap this interview up for us, what plans

do you have for the Atari forums for the future? Where will these forums be heading?

Luks: Let me answer that by saying that I've always tried to be open and receptive to what the users want the forums to be, so for the most part we try to let them guide the direction of the forums. As an independent support service, we will remain open as long as there are interested Atari owners, no matter what direction Atari Corp. takes.

The 8-bit forum is an example of this. Although Atari Corp. dropped the 8-bit line some time back, we will keep the 8-bit forum open as long as we have interested members. The same will go for the ST/STE forums. Even if this line is dropped (not that I know anything you don't know), we will remain as an after-market support service.

CIS is rapidly expanding outside of the USA, and we expect to see this as our largest growth area in the near future.

Atari Corp. is at a very critical junction (in my opinion) in that the ST has been around for seven years and the STE is basically the same technology. The initial introduction of the TT was "less than gangbusters," and while the STBook is a cute unit, it's still basically an ST. The Portfolio has carved out a profitable and strong niche in the palmtop market, but that market is growing by leaps and bounds. Bob Brodie has alluded to some strong moves and some terrific new machines, but until they become reality, I think a lot of Atari owners and Atari watchers have adopted a "wait and see" attitude.

So, to get back to your question of what's in the future for the Atari Forums on CIS? More of the same independent service and support we've provided for the past 10 years, with some expanded coverage and access outside the USA. And, hopefully, some interesting pricing plans as an alternative to the present hourly structure along with the flexibility to expand or adapt to whatever Atari Corp. does in the computer marketplace.

AIM: Thank you, Ron, for taking the time to talk with me and the readers of AIM!

Luks: My pleasure.

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With a local phone call, you can "post" messages, want ads or announcements just like you would on a conventional cork bulletin board. However, unlike the cork board, you can also find out what's happening around town, download the latest shareware/PD software, have a friendly "conversation" with your neighbors or even play an online game.

Now, imagine expanding this electronic Bulletin Board concept to include the entire United States. Better yet, bring in other countries like the UK, Germany, Japan and others. What you now have effectively describes the General Electric Network for Information Exchange, better known as GENie.

GENie is a multi-mainframe computer system accessible from most major cities in the United States and around the world. In the daytime, the computers are used by major corporations and banks to handle the tremendous computer workloads they produce. However, during the night, on weekends and many holidays, GENie lowers its rates and opens the doors for "the rest of us" and becomes one of the largest Bulletin Board systems around.

But don't let the size of GENie scare you off. GENie isn't all that much more difficult to navigate than your local BBS. To make things easy to find, GENie is divided into "pages." Each page is designated for a particular topic or activity which are called RoundTables. The easiest way to visualize what a RoundTable is, is to think of a RoundTable as a much larger version of your local BBS.

For example, the Atari ST RoundTable is located on page 475. To get there you would type M475 to move to

page 475 (or you can simply type ST).

Upon entering a RoundTable, you are presented with a menu of several options. Option one takes you to the bulletin boards. Like all BBSes, the bulletin boards area is the heart of the system. Here, hundreds of messages are posted every day on just about everything and anything that concerns Atari.

Do you have a question for the CodeHeads? Would you like to discuss a new product with Double Click? How about Goldleaf, WizWorks, Lexicor, ISD, Wuztex, GFA, Fast Technology, Gadgets by Small or Gribnif?

These and other Atari developers are all active in the ST RoundTable Bulletin Boards. And with GENie, you have a direct line to all of them.

Of special interest to Atari users is Category 14 which is monitored by several Atari Corp. officials. What better place to get information on the latest developments and products than from Atari Corp. themselves? Better yet, you can ask (and get answers!) to your questions directly from Atari, many times in 24 hours or less.

Option two takes us to the "chat" area or, as it is called on GENie, the Real Time Conference rooms (RTC). Unlike most BBSes, where you can chat with a single person, in the RTC room you can chat with hundreds of people. In fact, every Wednesday night at 10(EST) there is an Atari-party going on—and you are invited! On "come-as-you-are" nights, the RTC is a free-for-all (structurally speaking) where people just jump in and mingle with the crowd. On "Black Tux and Tie" nights, a guest is invited to discuss their new product or service and to take questions from the audience. (Afterwards, though, it's back to Atari-party time!)

Option three takes you to the ST library. Since uploading to GENie is free, thousands of files are available for

John Peters

downloading with 10 or more files being added to the list on a daily basis. Utilities, word processors, games, pictures, commercial demos, online magazines—all of these and more are available for downloading. If it's public domain or shareware, chances are you will find it in the ST library.

And that's just the Atari ST RoundTable! There are RoundTables for photographers, writers, police officers, teachers, musicians, lawyers and doctors, to name a few. Some other areas covered are up-to-date news, weather and sports; real estate; religion; scuba; astronomy; radio and electronics; genealogy; science fiction; home businesses; movie reviews; stock quotes; online stores and magazines like Compute! and Computer Shopper. The list goes on and on...

What about games? Sure, GENie has many single-player games similar to the ones you will find on local BBSes, but GENie has taken the online game concept a step further. In Air Warriors you can take to the skies with up to 50 other pilots in a real-time air battle, complete with stunning graphics. Later, pull up a chair to a poker table and play some cards. Or maybe Backgammon, Reversi or Chess is your specialty? Adventure games? You haven't experienced adventure until you have tried a GENie multi-player adventure such as Federation II, Stellar Emperor, Orb Wars or the ever-popular Gemstone III.

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If GENie sounds complex, it is. To the new GENie member, moving around GENie can be somewhat confusing. With a little practice, the command structure and menu system is fairly easy to figure out. However, thanks to Tim Purves, a long time ST programmer, there is now a much easier way to navigate on GENie. Tim has come up with an amazing front-end program called ST Aladdin. ST Aladdin allows you to do much of your online work offline. That is, ST Aladdin automates many of the things that you previously had to do manually. This not only saves you time but money as well.

Speaking of money, local BBSes do have one advantage over GENie—there is usually no charge to access them. However, GENie may not be as expensive as you may think.

Several months ago, GENie started up a new program called GENie*Basic. For \$4.95 per month (USA rates), you can access over one hundred different areas on GENie during "non-prime" time (6PM to 8AM local time, plus *all* day on weekends and GENie holidays). Many, if not most, of the non-computing RoundTables are included in the GENie*Basic rate. Also available is News, Weather and Sports, the Grolier's Encyclopedia and all of the single-player games.

Play Chess? It's 10PM and there is no one around who will sit down with you for a game of Chess? GENie has come up with the perfect solution. The multiplayer Chess game is now included in the \$4.95 package!

Even more surprising, GEmail is also part of the GENie*Basic service. This means you can send and receive all the GEmail you like for one low price. This feature alone is worth the price of admission to GENie!

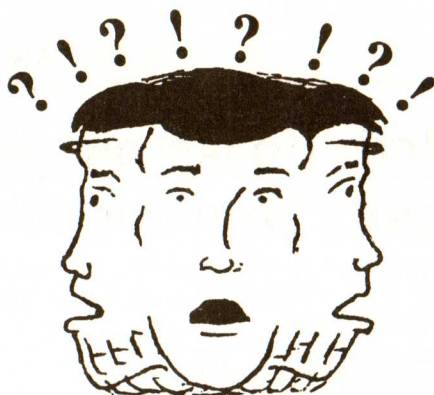
Exploring areas outside of the GENie*Basic does incur an extra charge, but it's not all that painful considering what you get. The USA rates are \$6 per hour at 300 to 2400 baud during non-prime time hours (\$18 per hour prime-time). If you are not already on GENie, you should take a long hard look at what GENie has to offer.

To sign up for GENie service, call (with modem) 1-800-638-8369. Upon connection type HHH. Wait for the U#= prompt. Type: XJM11877,GENIE and hit RETURN. The system will then prompt you for your information.

If you would like to receive an information packet about GENie, call 1-800-638-9636.

[About the Author: John Peters publishes the online magazine GENie Lamp for the Atari ST, IBM, Macintosh and Apple II RoundTables on GENie. John is also a SysOp in the Atari ST RoundTable. His GEmail address is GENIELAMP.]

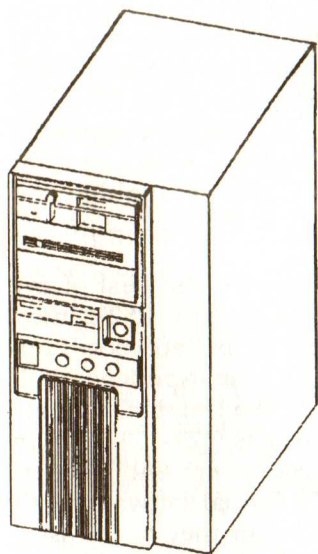
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WRITING A BULLETIN BOARD ON THE ATARI 8-bit

PART I: INTRODUCTION

[Note: This article appears courtesy of 8:16, the newsletter of the Bournemouth and Poole Atari User Group.]

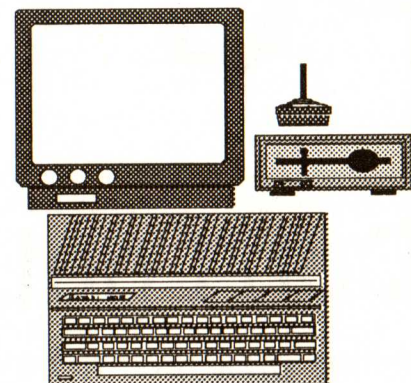
JAMES BASTABLE
BAP AUG

Let me tell you now, running a Bulletin Board is hard work and don't let anyone tell you different. But it's worth it. As a Sysop, you will make many new friends and gain a wealth of knowledge never before dreamed of, believe me. I have been running a Bulletin Board on the Atari 8-bit for over three years now and have never once looked back (people who know me will tell you different, but that was just my off days).

If you have an Atari 8-bit (and the necessary equipment) there is no reason why you cannot run a BBS (bulletin board service) on it. The machine is well suited for this. Even if you have now upgraded (?) to a new computer brand and still have your 8-bit, you could run a BBS on the 8-bit that was devoted to your new machine. That way you can leave your new machine free while still having a permanent link with other alike computer users.

This series of articles, split into four parts, will attempt to show the more experienced BASIC programmer how to go about writing a Bulletin Board. Contrary to popular belief, Atari Basic is quite capable of controlling a Bulletin Board of speeds up to 1200 baud which will suit most purposes. For higher speeds, I would recommend inclusion of machine code routines to handle input and output.

Anyway, let's get straight down to it. Before you start thinking about software you must have the correct hardware. Aside from your computer and tv/monitor, you will need a modem capable of Auto-Answer, pos-



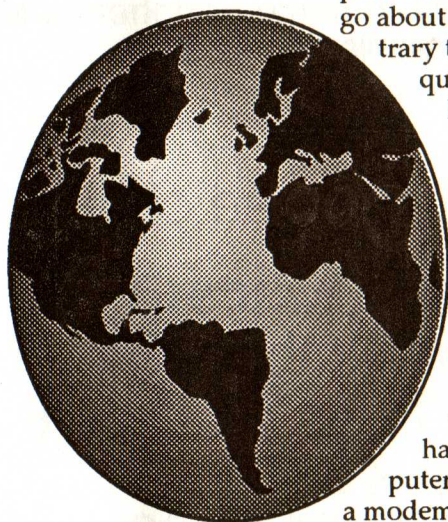
sibly an RS232 interface and at least one disk drive.

The computer you use should have at least 48K of memory. All ready-to-run BBS software packages will need this and you will certainly need this memory if you decide to program the software yourself.

The Modem—I have had experience with three different modems—the WS-2000 with the Auto-Answer board fitted, the Miracom WS4000 and the Pace Linnet. In theory, any Hayes-compatible modem will be suitable. Atari's own SX-212 modem is Hayes compatible and connects directly to the Atari as an SIO device.

The Interface—To the best of my knowledge, all the available RS232 interfaces are suitable for bulletin board operation. I can talk from experience with the 850, the P:R:, the Datatari and one that Derek Fern sells (021-353-5730) in kit form. The Derek Fern and Datatari interfaces need a special software handler to be loaded before they can be used. This RS232 handler is in the public domain. Once this handler has been loaded, the RS232 interface is treated as a standard 850 Port 1.

Disk Drives—A modest Bulletin Board can be set up using just one drive. Using a RAMdisk, such as on the 130XE or the Rambo, will boost speed and storage capacity. However, you will find that two or more disk drives will be essential once you start adding public domain downloads to your Board.



I actually use the SupraDrive 20 megabyte hard disk, but its price will deter most people from buying it for a bulletin board on the 8-bit. As a matter of interest, I have recently made contact with a company in America which is selling interfaces for hard drives or complete kits ranging from five megabyte removable to 80 megabyte fixed drives.

For further information contact Computer Software Services, PO Box 17660, Rochester, NY 14617 Phone 716-586-5545.

Software

You have two choices for software. 1) Use an available bulletin board program, either commercial or from the public domain or 2) write your own. I favor the latter for reasons I will explain later.

In the public domain, I know of two programs that allow you to run a bulletin board. The first is ECABBS which is very basic and FoRem which was released in many different versions of complexity. Documentation for these two is sparse to say the least and for this reason I would not recommend them for the beginner. Having said that, most Atari bulletin boards in this country were run using FoRem with a certain degree of success. *[Ed: Here in the states, we also have AMIS (from the MACE user group) and AtariLink (a recent release). Both are written in BASIC.]*

On the commercial front, I know of only one BBS program, Bulletin Board Construction Set (BBCS for short) from the Antic catalog. As far as I know, this program is still available. BBCS, as with all Antic programs, comes complete with clear and precise instructions. The program is very powerful with some nice features but does have a tendency to crash now and then. For the casual bulletin board operator, this program is ideal. But, because of the crashing problems, the serious operator will find it unreliable. If a choice had to be made, I would recommend BBCS over ECABBS and FoRem every time. *[Ed: Commercially available BBSes for the 8-bit in the US include BBS Express Pro, Carina II and Oasis BBS.]*

This short overview of BBS programs explains why I decided to write my own software. At first sight, writing your own BBS seems a daunting task, but let me assure you this is not the case. BASIC programming experience, however, is essential. If you are a competent machine code programmer, you should have the experience to program your software with little difficulty.

This series of articles is aimed at the experienced Basic programmer who may think writing a BBS program is too complex (which it's not) or who does not have access to the appropriate information.

The major setback for most programmers is the mistaken belief that programming the 850 Interface (or anything that emulates it) is beyond their scope. I will present to you BASIC routines that I know work, but it is not my intention for this article to be a substitute for the 850 Interface manual. If you can get ahold of or al-

ready own the 850 manual, I suggest you use this article to complement it.

My own bulletin board runs purely in BASIC without a machine code routine in sight (except one which really isn't necessary but is there just to speed up a certain operation). I do use BASIC XE for ease of programming, but nothing else. Turbo BASIC can be used for the same reason and, of course, an increase in speed.

Writing a BBS program can be quite arduous, but not in the areas which prevent most from making the attempt. The program itself must accomplish three tasks:

- 1) Handling input and output from the Modem. The easy part.
- 2) Control a database of messages. Can be hard or easy depending on how many messages you want to store.
- 3) Be user friendly so as to allow the user to log on, do what he has to do and log-off in the minimum amount of time.

The above functions should be transparent to a caller, but what must be apparent is an interesting bulletin board. It is easy to be so involved with the programming aspect that you lose sight of the important part—the board must be interesting. There is nothing worse than going to all the trouble of creating a board only to find no one calls because you have not put enough effort into the layout and content of the Board.

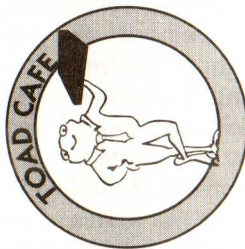
Before I end this introduction to the series of articles, let me leave you with an example of how easy it is to use Atari BASIC with a modem. In the following routine I show you how to detect when any modem has answered a incoming call.

```
100 CLOSE #1 :REM To be sure.
110 OPEN #1,4,0,"R1":REM Open to Port 1.
120 XIO 34,#1,0,240,"R1":REM Configure the port.
130 STATUS #1
140 IF PEEK(747)=253 THEN REM Modem answered call.
150 GOTO 130:REM Modem not answered,retry.
```

There, that was easy. If PEEKing location 747 had equalled 253 then we know that someone has rung, the modem has answered and a successful connection has been made. To find this out, I used simple trial and error but when you find something that works, you stick with it. It is not important to know how the XIO command works, the fact that it does should be enough. However, I will go into greater detail later.

The second part of this article will deal mainly with XIO RS232 input and output commands. The third installment deals with handling incoming and outgoing data and the fourth with Xmodem file transfer. The articles will not write a bulletin board program for you but only aim to steer you in right direction.

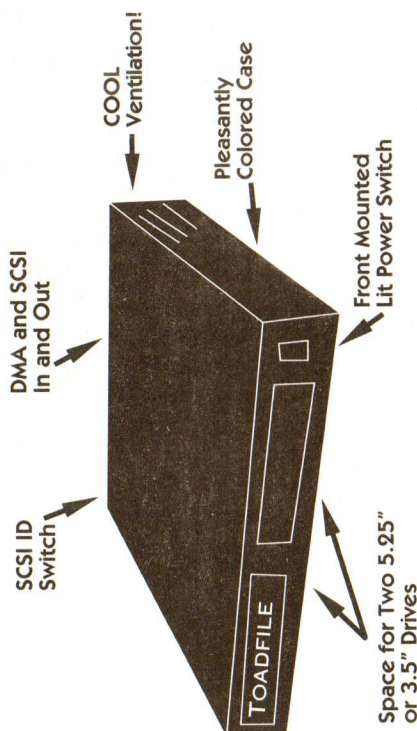
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FRESHLY CAUGHT

The Atari ST's have always been finicky about monitors. With a seemingly endless array of color monitors on the market (at reasonable prices, too), why should we be bound to Atari brand color monitors? That's a good question. The answer is that the Atari uses *analog RGB* and until very recently, *TTL (digital) RGB* was the norm. Now that the analog systems of VGA and Super VGA are more popular, the analog RGB monitors those systems require are more popular too. So you'd think the problem would be solved. Lo, a quandary still exists. Now, the mainstream monitors are too fast for the Atari's to use! Most VGA and Super VGA monitors have a fixed horizontal scan rate of 31.5KHz, and the Atari runs at 15.75KHz. So, while the RGB standard has changed in our favor, the speed issue's still

boxing us in. So when you boil all this down, you get a relatively small set of monitors which will actually work on an ST. This set includes the Atari SC1224 (12") and SC1435 (14") monitors, a few "multisync" monitors (which have the ability to lower their horizontal sync rate to 15.75KHz), and the handful of monitors that, for whatever reason, were made with compatible specifications. We sell them all, if you like the Atari name brand monitors, (including the new SC1435 14" color monitor and the SM147 14" monochrome monitor) that's cool - we have them. We also have great deals on multisync and other compatible monitors, like the Magnavox LCM135 and our own refurbished **Toad-RGB** color monitors. So weigh the options and see what fits you best. Any questions? Call the chef.

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|#|Play a Game       |=|Your Stats        |
|>|Upload a File     |<|Download a File   |
*-----*
|          $ = Your PersonalMacro          |
*-----*

[P]ost a Message Bill Ray!

Section > General Interest
Minutes > 829   5:18am
[?]/Cmd :

Lf Off Ec Off Tr Off St On Pr Off Ca 01% Full Duplex 2400 Baud 08:07:30

```

Carina II BBS System v2.5

A Great 8-bit BBS

[Note: Excerpts from the Carina literature used in this article are done with permission of David Hunt and Shadow Software.]

Carina II represents an enormous step forward in the development of electronic bulletin board systems (BBSes) for the Atari 8-bit computer. It is an expandable, full-featured, customizable and easily modifiable bulletin board system that offers power to its users *and* its SysOp as well!

Carina II uses what are known as Special Interest Groups (SIGs for short). A SIG is like a mini BBS within the major BBS, which is Carina II. Each SIG has its own message base, database, file area, game area, voting poll, bulletin's, etc. SIGs are definable by the BBS Sysop to cover whatever topics he/she wishes. Carina II offers 26 SIGs with up to 255 messages on-line per SIG. The maximum number of files online is limited *only* by the size of the system, which means you may store as many files for download as your drives allow.

Phillip Keen
HACE

There are hundreds of on-line games available for the system, and many other types of external modules available as well. A couple of handy ones which come to mind are the On-Line Area Code Locator and the On-Line Biorhythm Analyzer. You can even run many non-BBS programs written in BASIC with little or no modification!

Carina Features

Among its other fine features, Carina II offers graphics support for ATASCII, VT-52, Color ANSI and Commodore Color Graphics. Some of the Commodore PetASCII screens are better than that of *any* Commodore BBS itself. Plus, with Carina, it is easy to offer almost any type of graphics online that the Sysop should desire. It is truly a very flexible system.

Now for the Sysop's options and support. Carina II is *guaranteed not to crash* (due to the fault of the program, of course)! On-line BASIC and SpartaDOS capability let you modify the BBS or do DOS activities from *anywhere*, with password protection for maximum security in accessing these Sysop Commands.

Nineteen modules (programs) make up the Carina II Bulletin Board System, with the Modem Operating Environment (MOE) and other machine language routines giving Carina II its speed.

SigOps (people with Sysop powers only in specific SIGs) and SysOps can write "form letters" where the current user's name (or any other item of the user's status) can be substituted in a specified location of a message or text file.

While the user is online, there is a full-page, multi-tasking Sysop window that allows the Sysop to modify the current user's status while they are online without them even knowing about it.

Software and Hardware

Carina II supports 300, 1200 and 2400 baud using any Hayes-compatible, XM301/1030, Supra or SX212 modems. And 9600 baud support is in the works. The software supports the R-Time 8 Cartridge (which is *highly* recommended due to SpartaDOS bugs in the date at the end of the month), ICD's MIO, the Black Box, 850 Interface, P:R: Connection, and possibly many other configurations as well. Carina II has a Printer Support Option and works with any drive that SpartaDOS supports.

I have been working with computers for over 13 years and with bulletin board systems for over 11 years. Carina II is by far one of the best, if not *the best* BBS I have seen. It is very sleek, and if you do not like the present format, you can always modify it or use an option to style it to your own imagination.

Drawbacks to Carina

However, with any BBS program there are always a few negative points. Carina II is no exception. I dislike the SysOp's User Editor in the fact that two of the prompts in the Editor are so close to identical that it is

easy to delete a user quite by accident. I did this once to one of my best friends and did not even realize it until he left me a message complaining that his login information would not work.

Another drawback is that Carina II is just a tiny bit slower working in local mode than it does remotely. Although it isn't hardly noticeable, I do notice it a tiny bit.

Carina II is also a bit more tedious and harder to set up than other BBSes in its class. It is not a system that can be up and going within an hour. It took me almost two weeks before my Carina II system was up and running perfectly. It would have taken longer if it were not for the help of Carina II's current author, David Hunt. He helped me out a great deal in setting up Carina II. Other than these few drawbacks, Carina II is a fine BBS program and I highly recommend it to anyone.



Carina Support

In addition to all the above, Registered Carina SysOps get *free* access to both US and Canadian support BBSes:

Atari Clerk BBS (713)941-5467 (3/12/2400 baud)
Ace Of America (503) 285-4417 (3/12/2400 baud
and the main Carina Support BBS)!

The following has been excerpted from the Carina II sales literature, so you can see a few of Carina's fine features, and also how you may order the software.

Here is a list of *some* of Carina II's features not mentioned previously in this article:

- Maximum of 65,536 users
- Over 1,000,000 combinations of access
- Self-Compacting message bases
- 40/80 column support
- Page Breaks configuration
- File descriptions, keywords, etc. are displayed along with download filenames
- Files can be marked and downloaded using a batch protocol!
- The contents of ARCD files can be viewed when Browsing or doing a Directory of download files

Enter this file into BAYMAY v2.5 to automatically give your users lower case letters in their handles.

CT1/End:

Section Carina Support BBS!
File # 181 of 112 Date 18/29/91
Filename WHEEL.MRC Size 7412
D/L Time 300=2mins/ym=1mins
Sent by 35-West Wizard
Accesses 3
Brief Wheel of Fortune for Carina II
Keywords WHEEL/ 2.XX/ GAMES/ MDOSEC/

This is Wheel of Fortune for Carina II. It has been set up for 80 and 48 column. It looks good for VT52, ASCII, and ATASCII. Docs are in MRCed file.

CT1/End:

18 044 Ec 044 Tr 044 St 044 Pr 044 Ca 013 Full Duplex 2400 Baud 181 112

- Six file transfer protocols include XModem, XModem CRC, YModem (1K X-Modem CRC), YModem Batch, C-Modem Batch and ASCII. Other transfer protocols are available
- Free upload time given
- Files can only be downloaded if the user has enough time
- Up to 26 voting polls can be online within each SIG (676 polls total)
- Message bases have full threading and "random access" capability
- Messages are tagged as "received" after the recipient has read them
- True Electronic Mail and Electronic File-Mail (files can be sent to individual users just like E-Mail)
- Databases and Games using submenus (up to 3,328 databases)
- Single-letter (hotkey) input now available as well as macros or English input!
- Built-in terminal program with file transfer capability
- Networking ability is available free! Multiple Networks to choose from!!

To run Carina II, you need SpartaDos 3.2 or greater and at least 500K of storage capacity. (Two XF551 floppy drives, for instance.) An R-Time 8 cartridge is highly recommended (it's nice to have an accurate clock and proper date setting).

Carina II was originally developed by Jerry Horanoff. The software is now owned and programmed by David Hunt, owner of Shadow Software, with modifications available from a wide variety of other Sysops who run Carina II.

Carina II v2.5 is now available for only \$50 plus \$5 S/H, and that is less expensive than it has ever before been offered. Shadow Software has been bringing you the best for less since 1979. In the Shadow Software tradition, with the purchase of Carina II, the price was lowered while support took a large step forward. There is now more support for Carina II than there has ever been in the past, and at a reduced price!

To order Carina II:
David Hunt
8023 N. Berkeley, Box 2
Portland, OR 97203

[About the author: Phillip Keen is the SysOp of Atari Clerk BBS in Houston, Texas, Phone: (713)-941-5467.]



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Turbo BBS for the ST

I have seen write-ups on other BBS systems in AIM, so I had to write in to talk about my favorite, Turbo BBS.

Turbo BBS is written by Bill Miller. Version 2 of Turbo Board makes everything else out there seem second rate. Like Michtron advertised about its own BBS, Turbo 2 is *fully* user configurable.

You can set up your own menus and affix whatever function to whichever key your heart desires. You can also have Turbo 2 run *any* external program from any menu. With these options at your disposal, submenus, submenus within submenus, etc. are possible. (In fact, I have a Main menu for P3ACE members only on my BBS, with a separate games and utilities menu underneath that one. These menus are all in addition to the standard main menu and games menu that other users see.)

With Turbo 2, there is no cryptic scripting language to learn. You can accomplish basically anything using simple batch file commands in conjunction with the configurable menus.

Turbo 2 is modularly designed. Bill Miller realized he could not incorporate all the features he wanted in a standard stand-alone system and still keep memory requirements down enough for a 512K machine to be able to run it.

His solution was to create 11 separate system modules. When a user selects the file transfer area, for instance, the BBS exits the standard System module and loads the Files module. This opens up enormous amounts of memory for TSRs and more complicated games.

It also makes running Turbo with external mailers (i.e., Binkley

Steven Leser
P3ACE

for FidoNet) much more stable than under any other platform. Amazingly, switching between modules is lighting fast. My users never know the difference.

One of the huge advantages of Turbo 2 is its message SIG system. No longer are you stuck with one message area filled with multiple message bases. Now, you can organize similar message areas into SIGS.

For instance, my BBS is organized into seven SIGS. SIG 1 is a Local message SIG (with eight message areas), SIG 2 is a P3ACE SIG (with eight local message areas on Atari computers). SIG 3 is a FidoNet computer SIG (7 FidoNet network areas on Atari computers, anti-Virus topics, anti-piracy discussion, and more). SIG 4 contains FidoNet domestic issues! (8 message areas on cooking, crafts and various other domestic-type issues).

You can assign access levels to each SIG, and you can allow different people access to only certain areas within each SIG. This is probably my favorite feature of Turbo

Continuous scroll off, Handles on

Msg Cmd (?=Menu): ?

[A] = Check for All messages to or from you
[B] = Check for Messages Addressed from you
[C] = Check for Messages Addressed to you
[D] = Delete Message
[E] = Enter Message
[F] = Read Flagged Messages
[G] = Flag All Conf F-Mail Messages
[H] = Toggle Message Editor Initial Command Summary ON/OFF
[L] = Locate and Read (search) Messages
[M] = Read Marked Messages
[O] = Other Message bases
[R] = Read Messages
[S] = Scan/Mark Messages
[W] = Message editor Word Wrap toggle
[X] = Toggle continuous scroll on/off
[Y] = Set continuous messages scroll delay
[Q] = Quit to Main menu

Msg Cmd (?=Menu):

Lf Off Ec Off Tr Off St On Pr Off Ca 00% Full Duplex 2400 Baud 00:15:15

Current file directory is STFILES

Files Cmd (?=List)> q

///Turbo Board Main functions

B - Display Bulletins
D - Data Base (Text file library)
E - Email (Electronic Mail System)
F - File System (up/download)
G - Goodbye (logoff)

J - Junction to online games
L - Leave mail to Sysop
M - Message base System
P - Page Sysop for Chat
O - Other Bulletin Boards

H - HELP (enter help system)
S - SPACE EMPIRE ELITE V11

U - User Utility Sub Menu
V - Display Control Code Help

Feb 29, 1992 7:56 AM
Connected: 12 minutes. 8 minutes remaining.

Turbo Board V2 is now available, see the Bulletins (B) for more information

Turbo Board ST Version 2 (CR=Menu)>

Lf Off Ec Off Tr Off St On Pr Off Ca 00% Full Duplex 2400 Baud 00:03:24

BBS. It is more of the RoundTable or Forum idea. As GEnie and CompuServe have proven, organizing common message areas in this manner is a much more comfortable scenario for the user.

Batch uploading is another wonderful feature! Users simply hate having to sit by their computers while uploading files one by one. Now, with batch uploading, the user can upload dozens of files at once and return near the end of the session merely to type in descriptions. Turbo offers Ymodem, Ymodem G, Sealink and Zmodem batch uploads!

Turbo BBS is also fully FoReM compatible, that is to say that virtually every program, online game and nifty doodad that works with FoReM will run on Turbo BBS. Turbo creates FOREM.DAT and DORIN-FO1.DEF files that most external FoReM programs and games look for when they run. Most of the online games being released on the ST are designed to be run under these platforms!

As the Millers say, Turbo 2 is simply the most advanced and powerful BBS system available for the ST, period! Turbo Board Version 2's additional features include:

Expanded User Privileges and Bitmaps for Passwords

KByte/File Ratio System

BBS Handles/Real Name system

Full User File Editor

Masked Sysop Commands (for Co-sysops)

Many NEW Sysop Functions, including a new File Editor and Password Editor

Execute Files from Main Menu Commands

Many New Copy and Save Functions for Fmail and Other Files

Quick Help Edit Prompt in the Message Editor

Databases Can Use Archives and Users Can Easily Add Database Entries.

Access Levels for Database Entries

New Turbo System Generator with Expanded Features Makes Set-up Easy

An Update Program Lets Turbo v1 and FoReM ST Sysops Convert to Turbo v2

Version 2.1 is now under development and will be a free upgrade for SysOps running version 2.0. New features will include a new GEM-based BBS Executive (Version 3), Qmail support in message bases, an integrated full-screen editor and more.

Turbo BBS 2.0 costs \$89.95 US. FoReM ST v2 and Express ST sysops can upgrade to Turbo 2 for only \$69.95 US (with proof of ownership—manual cover or valid FNet node). Registered Turbo v1 SysOps can get Turbo 2 for \$29.95 US. (Canadian residents may send CDN dollars instead of US.)

Bitblit Systems, 1580 Liveoak Dr., Mississauga, Ontario L5E 2X6 CANADA

[About the Author: Steven Leser is president of the P3ACE user group and is the SysOp of Laser BBS (719) 527-1374.]

[Archive Tools - For Download of Partial Archives
(B)atch Files Transfer
(C)hoose directories for ALL NEW command
(D)ownload
(F)ind file
(L)ist files for Batch
(M)ark file for Batch
(O)ther file directories
(Q)uit
(S)can files
(R)emove file from batch list
(T)oggle Continuous Scrolling Directory List On
(U)pload
(V)erbose ARC/LZH/ZIP Archive
(W)ide directory listing

14388876 total bytes available for uploading
51503372 bytes maximum upload file length
available for download.

Current file directory is STFILES

Files Cmd (?=List)>

Lf Off Ec Off Tr Off St On Pr Off Ca 00% Full Duplex 2400 Baud 00:03:24

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- TinyTurbo030 \$599⁰⁰, FPU \$299⁰⁰, Virtual Mem \$299⁰⁰

QINDEX 2.2 BENCHMARK**

	Tiny Turbo 030	Atari TT	"OTHER" 030
MEMORY	497	812	989
REGISTER	1024	827	843
DIVIDE	1268	1024	1045
SHIFT	4457	3534	3661
TEXT	1032	894	751
STRING	5121	4756	5053
SCROLL	158	426	154
DRAW	1508	1003	646
TOS	2.06	3.06	2.06
PRICE	\$599	\$BIG	\$1,399

DYNACADD "3D CUP" TEST

In seconds 43*** 50 48

** ST HIGH-QuickST/TT-no blitter-vs TOS 1.4
TT using 32Mhz 68030/882-4Meg Atari Fast Ram
"Other" with 33Mhz 68030/882-4Meg 80ns Fast Ram
*** Using \$299⁰⁰ US optional 68882 co-processor
Note: Virtual memory option- \$299⁰⁰ US

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☐ GCR ☐ MegaTalk Hard Disk: ☐ Atari ☐ ICD ☐ SUPRA

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FREEZE DRIED TERMINAL

FreeZe Dried Terminal (FzDTerm) is a shareware, non-GEM interface terminal program written by Aaron Hopkins. The program requires at least 1 meg of RAM, supports color and mono display and Flash! DO files (scripts). It includes a program to convert Flash!, Interlink, Stealth, DTerm, QTerm and VanTerm Autodialer files and Flash!, Interlink and VanTerm Macro sets.

The software has VT-52, ANSI, UBT-Graphics and Instant Graphics screen emulation capabilities. It allows the use of any transfer protocols in a easy to use shell that makes the protocol appear as a internal part of the terminal program.

The Auto-Dialer has 45 slots and supports redial and chain dialing, Auto-macros and auto-logout with auto-learn for each slot on the dialer. FzDTerm has a Capture buffer and a full-featured text editor and offers access to disk commands including floppy format and LZH/ARC/ZIP archiver shell support.

Some Thoughts

That's quite a list of features. Now that all of that is out of the way, here are my own opinions and observations on this program. First of all, I am an dyed-in-the-wool InterLink user looking for a terminal program with a scripting language that is as easy to use as InterLink.

While some may say that by not using GEM, FzDTerm is not an easy program

to use. What the author has done, though, is written his own interface that is similar to that on a Sun workstation, complete with buttons that sink when pressed. Instead of a system of drop down menus, FzDTerm uses a series of screens that, after you get use to them, become second nature.

I use this terminal program with a local BBS at 14,400 baud and it has yet to miss a beat. I like the way transfer protocols are integrated so they appear to part of the terminal program.

And, if you wish to add a protocol that the author does not supply, FzDTerm can pass the parameters to the stand-alone protocol program, making it appear as part of FzDTerm. This way, as new protocols come along, you can use them with the program.

Allan Coker
SWAG

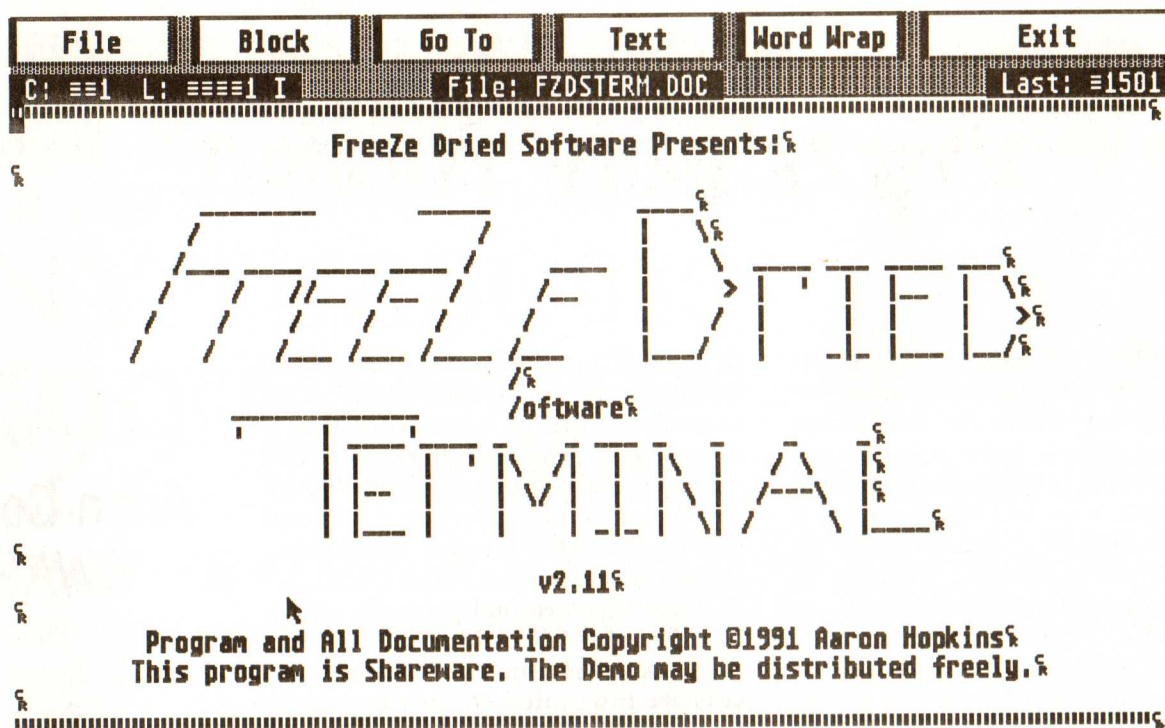
FreeZe
Dried
Software

FreeZe Dried Terminal v2.11 (Demo)
Copyright ©1991-1992 Aaron Hopkins

FreeZe
Dried
Software

-- Main Menu --

The Autodialer	Transfers	Macros
Autodialer	Receive File	Macro Editor
Quick Dial	Send File	Alog/Amac Editor
Init Strings	Edit Batch Queue	Offline Amacs
Capture Buffer	ASCII Send	Other
Scrollbar	Text Editor	Rs-232 Config
Capture Setup	Text Editor	System Setup
Script Files	Disk Commands	Font Installation
Execute .DO	Disk Commands	Use Accessories
Stop Current .DO	Default Paths	Save Setup
- Return Online -		Exit FzDSTerm



In color, the screens are very striking, supporting things like multiple colors and shadows. In earlier versions, monochrome was not well supported, but that has been changed as of version 2.04. In version 2.10, auto-learn was added to Auto-Logon, which makes it a lot easier to create auto-logons for specific BBSes.

I find this program fits my needs and it is still a growing program. By this I mean that the programmer will make additions to it, as requested by the users.

If I have any complaints, it is the documentation. Even the author admits the documentation needs work and is requesting help in this. As we all know,

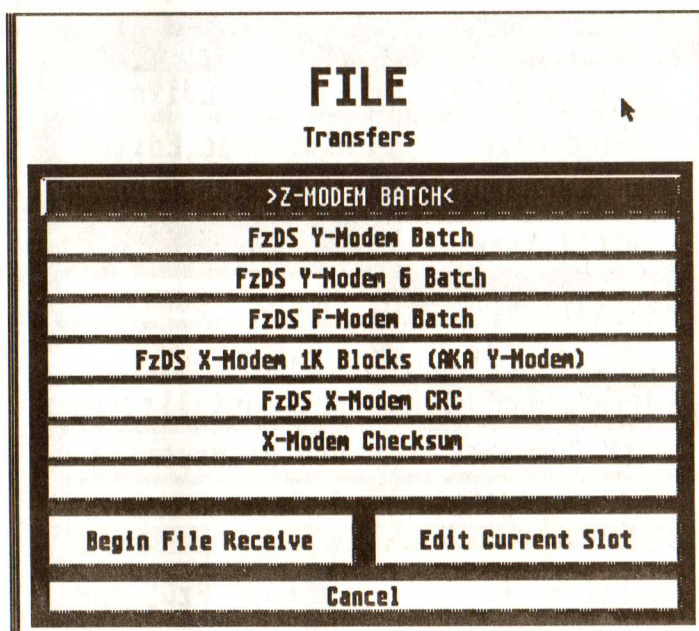
writing of documentation is one of the largest and most thankless parts of a creating a program, one that never seems to make everyone happy.

Features I would like to see added are 1) at completion of contact with a BBS, if you were chain-dialing, start dialing the next BBS in the chain and 2) a mini-BBS. I know these can be added through use of script files. But, like many people, I am lazy...or I would have written my own terminal program!

FreeZe Dried Terminal is a commercial quality program, in my opinion. It is available from many BBSes, may be downloaded from the online services or can be purchased directly from the author himself. The cost to become a registered user is only \$25. For this small fee you get the latest version of FzDTerm and a "key file." With this key file protection system, you only need to download the latest versions from you favorite source and you will have a full working terminal program. The author may be contacted at:

In North America:
FreeZe Dried Terminal
c/o Aaron Hopkins
1213 Walnut Avenue
Manhattan Beach, CA 90266

In Europe:
FreeZe Dried Terminal
c/o Ben Van Bokkem
100 Broughton Ave.
Aylesbury, Buck HP20 1QB
ENGLAND



MaxiMiser and MaxiDoor

Allan Coker (SWAG)

MaxiMiser and MaxiDoor are two companion programs. MaxiDoor is a Door program that runs on a BBS and MaxiMiser is program that a BBS user runs on his/her ST.

Both programs are written by Shawn Smith of Ajax, Ontario, Canada, in compiled GFA Basic. They are compatible with the Q-Mail or MarkMail programs used on some IBM BBSes. What they do is cut your online time on a BBS from the usual 30 minutes or so to about six minutes. This is a real blessing on long distance phone calls. You will still need a terminal program to make the connection to the BBS.

MaxiDoor

MaxiDoor on a BBS takes all new messages in areas you are interested in—as well as a listing of all new files uploaded to the BBS since you last logged on and any Confmail files—and creates a compressed packet. This compressed packet can then be downloaded to your ST.

When you log off the BBS, your high message read counters are reset. MaxiDoor will run on FoReM, ///Turbo and Express ST Pro BBSes on the ST. Both MaxiDoor and MaxiMiser support ARC, LZH and ZIP methods of file compression.

MaxiMiser

MaxiMiser takes the compressed package and uncompress it, allows you see what new files are on the BBS and transfers the

Confmail files to disk. It lets you read and reply to any captured messages at your leisure. Replies are placed in a compressed file you upload during your next connection to the BBS. MaxiDoor (on the BBS, remember) then uncompresses the messages and automatically places them in the correct message areas for you.

My description of the operation of these two programs just glosses over the total operation. Once you use the software, you will wonder just how you got along without these programs before. The worst problem you will now face in the world of BBSing is in making the connection to the BBS.

A Word about the Author

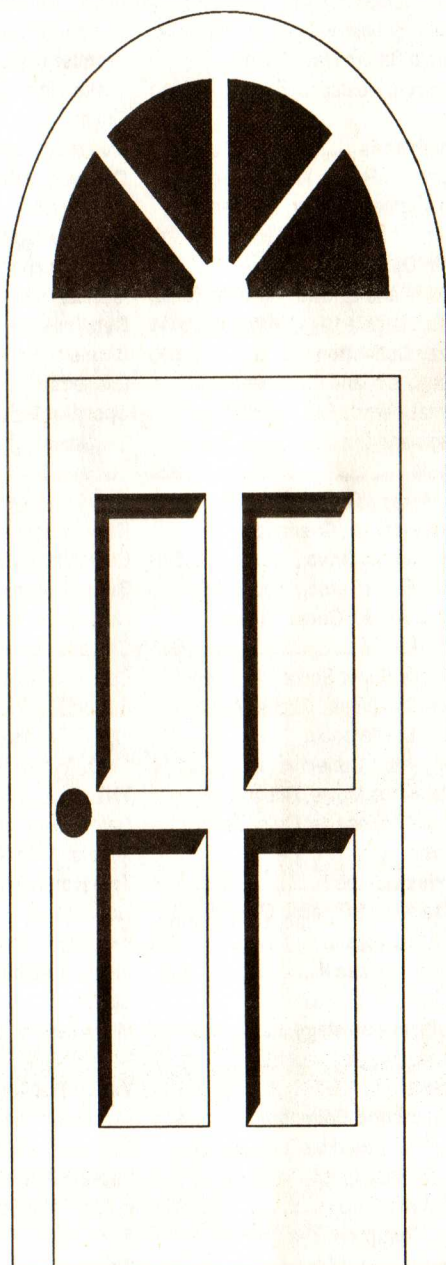
Shawn Smith has written a very useful program for the ST and has offered it to the world as shareware. He is only asking \$25 to become a registered user, a very cheap price for something that works so well. He is willing to make addition and modifications to the program to fit the requests of the majority of his users.

MaxiMiser may be downloaded from any BBS that supports it. I understand that, while the author does request a fee from the user for MaxiMiser, he does not ask for a fee from BBS operators for MaxiDoor!

For the small registration fee, you get the latest version of MaxiMiser and a key file. With this key file protection system, you only need to download the latest versions from you favorite source and you have a full working program.

You may order MaxiMiser direct from Shawn Smith, 27 Carr Dr., Ajax, Ontario L1T 3E2, Canada or,

if you are in Europe, from Ben Van Bokkem, at 100 Broughton Ave., Aylesbury, Buck, HP20 1QB, England.



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Ghostbusters	Xybots, A.P.B.
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Old Maid, Hearts	Recall, Shadow Warrior
Hoyle's Games II\$23	Virtual Reality\$41
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Backgammon, Go	Virtual Reality 2\$36
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Decimal Dungeon23	Mavis Beacon Teaches Typing36
Discrete Math29	Mixed Up Mother Goose22
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First Shapes19	Read & Rhyme23
Fraction Action23	Read A Rama29
Fun School II (under 6 yrs)29	Speller Bee19
Fun School II (6-8 yrs)29	Statistics, Vol. 114
Fun School II (over 8 yrs)29	Super Kidgrid17
Fun School III (under 5 yrs)35	Telegram17
Fun School III (5-7 yrs)35	Trigonometry (True Basic)31
Fun School III (over 7 yrs)35	Typing Tutor/Word Invaders24

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PRESIDENTIAL PONDERINGS by Alvan Sherrill

I acquired a presumably public domain disk several weeks ago and finally got around to looking at it. Apparently, the disk had been circulating for the past 2 1/2 years on the bulletin boards. The screen opened with a menu with choices of music and scrolling text. I looked at the scrolling text and noticed a number of contradictions. First, the authors bragged about "cracking" the music files and expressed disdain for those who oppose "hacking" and "cracking". At the same time, they claimed their disk was public domain and urged the widest distribution of the disk. They stated that the text was heavily protected and warned against anyone trying to break into the scrolling code to enter messages for personal use. They had programmed at least one "boobie trap" to format the disk which had to be left unprotected to run. Apparently they felt programming was the exhalted domain of the privileged few and should not be meddled with by mere users.

The programming was superbly done, reportedly by THE HIGH TECH TEAM of Holland, and illustrated what could be done on an Atari 8-bit XL/XE computer. Unfortunately the text of the scrolling messages was filled with profanity making it unsuitable to use as an example of Atari 8-bit programming, not to mention the possibility of pirated music files. Since the scrolling text was protected, there was no easy or apparent way the typical user could modify the scrolling for his own purpose.

What was the purpose of this time consuming and difficult programming task? Because of the protection, the programs cannot be used by anyone except as a crude example of excellent programming by anti-social minds. What a pity. Perhaps the HI TECH TEAM will read this and see another view of their juvenile power game that serves little purpose and perhaps choose to direct their considerable programming skill in a more socially acceptable and personally rewarding direction.

ACE of St. Louis

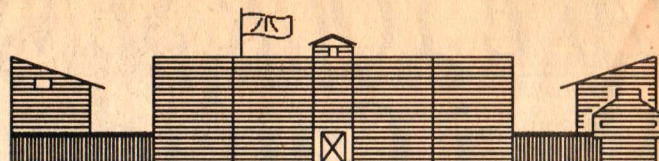
ACE St. Louis meets monthly at the Thornhill Branch of the St. Louis County Library located at Fee Fee and Willowick. The following is a listing of 1992 meeting dates and times.

Saturday March 28th, 1:30 p.m.
 Wednesday, April 29th 7 p.m.
 Wednesday, May 27th 7 p.m.
 Saturday, June 27th 1:30 p.m.
 Wednesday, July 29th 7 p.m.
 Wednesday, August 26th 7 p.m.
 Saturday, September 26th 1:30 p.m.
 Wednesday, October 28th 7 p.m.
 Wednesday, November 25th 7 p.m.
 Wednesday, December 30th 7 p.m.

For more information send inquiries to ACE St. Louis P.O. Box 3508, St. Louis, MO 63143 or to Genie Address T.Shoemaker.

President	Nick Barr
Vice-President	Greg Kopchak
Secretary	Tom Zenthoeffer
Treasurer	Wanda Schartman
Editor	Terry Shoemaker

ACE St. Louis is a member of the Midwest Atari Regional Council (MARC).



ATARI COMPUTER OWNERS RESOURCE NETWORK FORT WAYNE, INDIANA

Bob Kelley opened the business portion of the meeting by discussing plans for our Three Rivers Festival (TRF) event. Bob attended the kick-off meeting of the TRF Committee and had a couple of forms available for those ready to sign-up to help. We discussed moving the location of the event to the downtown library but the high sound level would probably not be acceptable.

Atari news was also discussed including Atari's presence at NAMM and Computer Chronicles planned program on the event. Atari is advertising now in Discover magazine. Supra has introduced a couple of inexpensive 9600 baud modems. Karl Fadus demonstrated Spectre GCR, the Macintosh emulator for the ST. He showed how to boot it and run an application like Hypercards and a game he had. Kim Stahn brought a Fujix P-40U Video Projector and had it connected to an ST. It seems to work but there was too much light in the room to see the projected image clearly though it is supposed to be able to project a 40-inch diagonal picture clearly.

Adam Kelley demonstrated VROOM, a racing game for the ST that supports a two-player play-by-modem feature and can be played using either the mouse or joystick. Mike Surface demonstrated Vengeance of Excalibur, an adventure role playing game set in Spain from Virgin Games, and Lombard Rally, a road race game.

ASTMUM ATARI ST/MEGA USERS (Montreal)

Our users' group consists of MIDI musicians, composers, videographers, artists, writers, technicians, students, teachers and business people. We also welcome new members, interested in learning about the ST/MEGA (even STE, MEGA STE and TT) models, and their applications, before purchasing.

Founded in 1987, ASTMUM provides its productivity-minded members with technical support, training and emergency assistance (24-Hour, Repair Hotline), laser printing and graphics services, as well as discounts (through participating dealers) on original software, computer hardware and music industry-related equipment.

To benefit its members, and the visiting public, our group has participated in these shows and expositions:

CEGEP Rosemont AtariFest, Montreal, September '88
 WORLD OF ATARI, Dearborn, MI USA, June '89
 PRODUCTION '90, Montreal, May '90
 SIIM '90, Montreal, June '90
 Windsor/Detroit International AtariFest, May '91
 PRODUCTION '91, Montreal, June '91
 SIIM '91, Montreal, June '91
 WAACE AtariFest '91, Reston, VA USA, October '91
 Chicago ComputerFest, Rosemont, IL USA, November '91

We have kept our members informed of Atari's progress on their most recent models (TT, MEGA STE, ST Book and Stylus) through our large periodicals library, videotaped show-tours and interviews with software and hardware developers.

Encouraging members to form special interest groups, we hold monthly meetings (usually the last Sunday of each month) and offer seminars and demonstrations.

Some members teach others, in "hands-on" recording studio environments, at generous discounts. Masters of piano tuning,

computer repair and instrument restoration work their magic. Incoming members are impressed by the efficacy with which our specialists troubleshoot the previously unsolvable. Even singers find help for their vocal problems!

In addition to helping ASTMUM musicians market their CDs, LPs and cassettes, at exhibitions and retail outlets, we have assembled a "sampler" cassette highlighting some of their work. You can order this extraordinary, chromium dioxide wonder (ASTMUMusic Sampler, '91-'92) for \$12.00 postpaid! Please specify your choice of noise reduction: Dolby B, Dolby C, DBX or Super D (this list will get longer because at least one, new, noise reduction system will be introduced this year). Make your Money Order (in U.S. dollars if you live in the U.S.A.) payable to K. Carter-Morgan and send it to our address, below. Your return address should be complete and clearly printed.

If you use your Atari in creating or performing music, and would like help in launching and publicizing an independent release, our group may be just the ticket.

Membership information, advice, product list and sampler cassettes may be obtained by writing to:

ASTMUM, Attn: K. Carter-Morgan P.O. Box 966, Station B Montreal PQ Canada H3B 3K5

or by phoning (514) 272-6631 (voice only)

Executive Exhortations by Kest Carter-Morgan:

First, members are advised that we are developing a super-quiet, semi-portable, 105 Meg. hard drive system for musicians. Those members wanting in on the quantity purchase benefits of this project should contact me immediately.

Second, I want to thank those ASTMUM members who have, recently, given their time and energy in presenting stimulating and informative demonstrations, as well as assisting in other club functions.

Third, we need input as to what material will be in our second music sampler cassette. Interested artists should discuss this at the May meetings (on the 17th and 31st).

Adieu for now!

KCM (ASTMUM)

BRAG ST

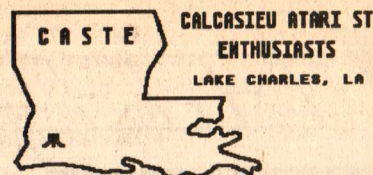


Buffalo Region Atari Group for ST's

Minutes of the BRAG ST January 16, 1992 General Meeting
By Dane Stegman

The meeting was opened by Chairman Mark Pierro at 7:30 pm. Starting off with club business, Mark read the December 1991 Treasurer's Report from Gerry Genson. Next, Mark explained that this meeting was our annual "Meeting of Review", which allows us to review the club's progress and make changes in our Constitution and Bylaws. After a short discussion, no new changes were offered by the membership. It was then announced that the club's insurance was due and would be sent out this week.

Then Carl Barron gave an excellent demonstration of PAGE-STREAM 2.1 by Softlogic. Next, Jeff Hontz demo'd the game OBLITERATOR by Psychosis. Jeff did a great job showing the game off even though we forgot to bring a joystick! After a small break, we had our three door prize drawings as follows: 1) 3.5" Flip N-File Disk Box won by Charles Tuppen, 2) Color Printer Paper won by Harv Hontz and 3) Seven different colored 3.5" Disks won by Bruce Stringer. We then had our usual software raffle, won by Charles Tuppen, who went home with OBLITERATOR. The meeting then ended with an open forum.



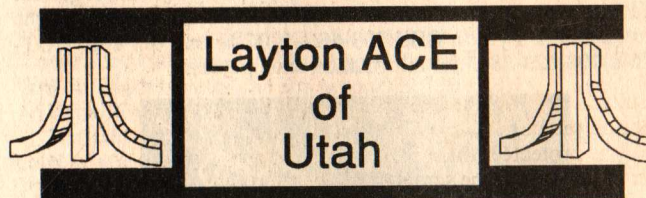
A NEW CLASS OF COMPUTER USERS

The goal of the Calcasieu Atari ST Enthusiasts is to increase awareness of Atari computers in Southwestern Louisiana. CASTE usually meets the last Saturday of each month. We meet at the College Park Nazarene Church, 340 East Prien Lake Road, in Lake Charles. Exact dates and times of meetings are announced in our newsletter and on our support BBS. Membership dues are \$15 a year. This includes a subscription to Atari Interface, CASTE News, and access to the AIM disk of the month. For more information write to CASTE c/o Tim Bowles, 314 W. Claude St., Lake Charles, LA 70605.

Tim Bowles President (318) 477-3243

Glen Kelly Librarian (318) 478-3960

General Store BBS 1200-14400 baud (318) 855-6939



The Layton Atari Computer Enthusiasts (L.A.C.E.) membership cost \$20 per year. Privileges include the AIM Monthly Magazine, access to the 8-Bit and ST club libraries, monthly meetings, monthly AIM public domain disks, free issue of AtariUser Magazine (available at club meetings), help and friendship. If you are presently not a LACE Club member and wish to join contact the one of following persons or write to LACE, c/o Marshall Walker, 1194 North 250 West, Layton, UT 84041 or call (801) 547-9902 or Irwin Brooks at (801) 731-1516.

Marshall Walker, President (801) 545-7152

Lee Hatchell, Vice President (801) 776-6687

Quhid Izatt, Secretary/Treasurer (801) 544-4399

Richard Clark, 8-Bit Librarian (801) 825-5823

Mark Seegmiller, ST Librarian (801) 773-8555

Dave Young, Publicity Coordinator (801) 776-6273

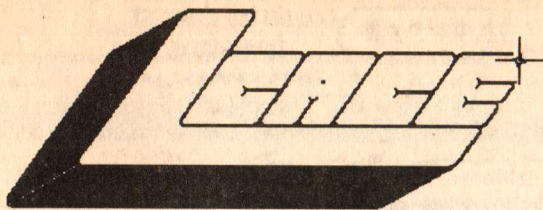
Irwin Brooks, Publications Coordinator (801) 731-1516

The L.A.C.E. Club Meets in the basement of the Clearfield Library every second Wednesday of the month at 7:00 p.m.

Mark your calendars for the next meetings: April 1, May 13, 1992

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L.C.A.C.E. P.O. Box 8788, Waukegan, IL 60079-8788

The Lake County Area Computer Enthusiasts (L.C.A.C.E.) was founded in 1983, and serves Northern Illinois and Southern Wisconsin Atari users. We are composed of 80+ members with several of our members belonging to dual groups (MilAtari, MAST, SCAT, RACC and TUG). Our meetings are held on the 2nd Saturday of each month at the Warren-Newport Public Library (excluding August picnic and December's Christmas party), 244 O'Plain Rd. Gurnee, Illinois (1 mile east of Great America).

L.C.A.C.E.'s dues are \$20 per/year for family membership. Privileges include a subscription to our newsletter which is published 11 times a year, and access to our extensive public domain/shareware disk library for the Atari 8-bit, ST/Mega and Macintosh computers. Members with modem call access the club areas of Python BBS 708-680-5105 or call our club HOT-LINE 708-623-3815 for information and updates.



MACE Journal December 1991

Welcome to the December MACE meeting, tonight's theme is the Atari Scavenger Hunt. If you're here tonight you can see a lot of Atari hardware and software. Looking around I see all kinds of stuff, an awful lot of 8-bit equipment. I have to sit down now the president is about to speak-

Last Month's Meeting

Early on in the meeting the president reminded us of the December Scavenger Hunt/Present raffle and the participation 'certificates'. Then the subject of the Atari mall show came up. Commanding the table to my left were the owner of Team Computers Mike Drysdale and his associate. Larry from the SoftHouse Computer Center was also there for a little while. The discussion was about the Atari Fair at the Southland Mall in Taylor. The pros and cons of doing the fair were flying fast and furious, as on the one side Team Computers and SoftHouse Computers would not really be able to advertise at Southland. There was mention of booths that one could lease for a small time. Also the time and manpower needed to man about 40 machines, at least 30 people will be needed to watch our computers at all times (Taylor is notorious for theft). The fact that 40 computers (with monitors and drives) have to be available for 2 days was also mentioned. On the other hand there is the point that we won't get much return from it if anything. A couple of stores in Southland do carry Atari products, But Lynxes and game carts may not be worth the sacrifice in time and money and weeding out the crowds for a couple of stores to make a profit. There was mention of other computer stores (like Radio Shack) that might be willing to setup a table with their computers. But how would that profit us? We could probably sign up a couple of members to our club, but most people won't join a computer club without a computer. The Sponsors of this project have met Wednesday, December 11. Only the MACE Forest will be able to keep up with this issue. You can

voice your opinion or read the latest messages and get very up-to-date news on the MACE Trail.

Last month the topic was showing off the software that the club bought for the December raffle. It was by coincidence that one of the raffle prizes was NeoDesk 3. I just happened to own a copy of NeoDesk 3, so I got to do a demo. Doing it was not as bad as I thought, because everyone broke up into groups and only occasionally would I get a straggler come up and ask about NeoDesk 3. But I will give a small review of it later in the MACE Journal.

I have several interesting subjects I want to write about. If you have a copy of last month's Journal you'll notice a more professional look to it. Thanks to a club member (Kelley Miller) we have access to a very nice desktop publishing workstation and laser printer. Hope to spruce up the Journal and I have a head start thanks to Kelley. Meanwhile I was busy recreating our club logo. The old Mace was losing detail when we tried to digitize it for the Journal. Using Cyber Studio I created a new Mace in 3d. Hope to have it on an upcoming issue of AIM and on the MACE Trail for download.

The MACE Net

Last month I reported bulletin board numbers in the MACE Journal. Well we have another number to write about. The Bloom County BBS at 582-0888 and with baud rate 300/1200/2400.

Our own BBS the MACE Forest has been very active with replies to the general meetings, if you have any questions for the members of MACE please feel free to leave a message on this board. The MACE Trail is where you can leave a message for a member. A list of members should appear at the end of the Journal and the MACE Forest can be reached at 278-6466 with 300/2400 baud modems. In the near future I intend to write about going online in the MACE Forest.

Spies Like Us

We walked forward slowly, up the stairs, in the very big doors of the union headquarters, down the hall toward the doors named 1050. A bright glow emanated out of the small slit between the closed doors. I knew that inside those doors lay the answer to all of our questions. Kelley grabbed the door knob, turned it and opened the door. Inside the glow of 3 computers lit the room, so did the lights. The room itself was small considering the size of the group of people. Kelley and I sat down in the fourth row. Up front on a table, 3 computer systems sat. When the president of the club asked if there were any new members, Kelley yelled out "Mace spies, were all Mace spies!"

After all the commotion died down the WAUG members showed a hardware upgrade to an STE and the same kind for an 8-bit (800XL), (the Atari TT did not need it). The president then asked for a vote on going to Chicago and spending some money on the Atari fair. The vote passed and the president will go to Chicago. Then the members displayed some pictures on each of the 3 computers. The pictures were mainly comparisons between graphics of each system. One computer was the STE, the other was the 800XL and the third was a TT.

There was a little joking going on here, Sheep and goats seemed to top off the conversation now and again. The club members had to watch video screens at about shoulder level height. The screens could have been a little higher. They gave out door prizes, the winner got a mouse for the 16-bit prize and for the 8-bit a numeric keypad. All in all I had fun spying on them.

President ... Ted NewKumet

Vice President ... Ed Hanson

Recording Secretary ... Mark Tappen

Journal Editor ... Mike Casper

8-bit Librarian ... Ray Simmonds

16-bit Librarian ... David Haykus

Meeting Dates March 17 April 21 May 19 June 16

If you need any software or hardware, you might want to call these places up and ask them about it.

Team computers 22205 Kelly rd. East Detroit, MI. 48021 (313) 445-2983

SoftHouse Computer Center 32647 Ford rd. Garden City MI. (313) 422-6760



P3ACE

The Prez Sez by Steven Leser

Well, it's been another month, and the treasury has been rebounding nicely after we implemented the emergency cost saving measures. (It is approaching \$300.) One of the things that I did was to send out applications, and newsletters to all in the local area who had once been members of the club. This resulted in quite a few 'new' members. There have also been a few more people from outside the country applying to be club members. (Korea, and several countries in Europe this time instead of North Africa).

Fred Koch, our new ST librarian outlined a master plan for providing the maximum amount of access to our vast library, to our users. 90 Megs of our best files will be on the BBS (LASER BBS 719-527-1374), when Fred gets finished, the library will include close to 200 Megs of public domain and shareware files. In addition, our users merely need to send him a self addressed, stamped envelope to him (with proper postage) and he will send on disk the files you request. He will also allow users to call him and he will have the files prepared on disk when he arrives. One merely has to pay for the price of a disk.

Roger Meston is planning a similar arrangement on the 8bit side of the house. Laser BBS will have 20-25 megs of the best 8bit files online. Considering that the average 8bit file is 40-100k, that is a simply huge amount of files.

I went to the 8bit meeting last month, and I was very impressed. The 8bit users seem to take a much bigger role in the overall flow of the meeting! Not only did they ask a lot of questions about the package Rick was showing off, they started modifying the thing to work with TurboBASIC instead of Atari BASIC! Rick should have a few more notes about that.

Take care, and we'll see you at the next SIG meeting!!!

ST SIG Notes by Terry Quinn

Steve Leser (Captain Picard) kicked off the January ST SIG meeting with an extensive demo of new club bulletin board, LASER BBS. Steve showed how to LOGON and other useful tips to make the board easier to use. Steve also showed everyone how to set up Quick Mail (aka Q-Mail). This is fascinating feature which gives users the ability to rapidly download messages and view them off line, in much the same way as Alladin does on GENIE. Steve also showed how to use F-Mail and "toured" the various FIDONET areas available on the board.

Fred Koch finished up the meeting with a demo of the P3ACE Disk of the Month (DOM). (We didn't received the current AIM DOM until the day after the meeting.) Fred also went through some of the features he's putting into the ST Library.

8-Bit Tid Bits by Rick Reaser

Not many showed up for the February 8-bit SIG, probably because there was a snow advisory for that night. We had a great time anyway. Members present discussed Jeff McWilliams efforts to start an 8-bit magazine and copies of his letter were passed out to all. We also looked at the latest catalogs from American Technavision and Toad Computers.

Rick demoed three programs he had recently received from American Educational Computers--Elementary Science Facts Grades 3&4; U.S. History Facts; and Vocabulary Word Builder. These programs weren't as good as the previous three, demonstrated at the January SIG, but they could be useful. At three bucks a pop, who's complaining? Rick also provided an encore demonstration of the "talking" educational program from Dorsett that uses the cassette recorder and a cartridge.

Next, the club took a tour of Steve Karasek's 1991 Tax Program. The program is in BASIC and tended to run slow in the opinion several in attendance, so we decided to see if it would run in TurboBASIC. Oops! Our TurboBASIC was on a MyDOS disk,

so names of files could not start with a number. So we need to change a few file names. Oops! (Our illustrious P3ACE President and ST master, Steve Leser popped in and actually knew what and error 165 was and helped us trace through INPUT statements in real time. Wow!) More file names start with digits than we thought. More mods. Oops! The mall guard is getting ready to kick us out of the meeting room. Gotta go!!! It has now become my quest to get this program to run with TurboBASIC. I let you know WHEN I succeed.

We didn't have time to run copies of the AIM DOM, so Roger said he would post a Disk Commanded version on LASER BBS. Those without modems will need to wait until the next meeting.

I forgot to mention that at the January SIG, John Sandgren, donated a European program, "Fighter Pilot" to P3ACE. It comes complete with the patented "LENSLOK" security system, which everyone got a kick out of at the January meeting. Rick Reaser's dad also donated "The Seven Cities of Gold" and "Pinball Construction Set" for the club to sell. These three programs (along with several other titles) are for sale, cheap, to help reinforce the club treasury.

On another note, your acting 8-bit VP, me, accepted the post a 8-bit editor for Current Notes magazine. This should be a big benefit for the club, as we will now have access to all the latest and greatest 8-bit news and stuff. Already, several people have volunteered to become feature authors. Now we will have authors for two national Atari magazines. As a part of this new job, I got a CompuServe account. Now Hugh DeLong will have a fellow P3ACER to send E-mail to. My account is 72130,2073.

Editor E-mail by Sam Cherry

Diskettes will now be for sale by the disk librarians. See Fred Koch, if you need 3 1/2 inchers and Roger Meston if you need 5 1/4 inchers.

Check your mailing label to see if your dues are getting ripe. Lots of people's memberships are up in January. Sam Cherry is temporarily dropping off GENIE, so someone else will be filling in for him for the next couple months.

Be sure to check out LASER BBS!!! The FIDONET mail is really neat, especially for you 8-biters. If you don't have a modem, buy one or borrow one of the club modems. You are really missing out if you aren't a telecommunicator. The new, big, Hard Drive will be here in March, hopefully, and there will be even more options available. DIAL (719) 527-1374 NOW!!

R.A.C.E.

Pres. Lewis Midyette 828-4319

Vice Pres. Eric Schofield 851-5134

Secretary Don Nelson 942-2764

St Librarian Tony Manino 851-8092

8-bit Librarian Arthur Katz 881-0247

Treasurer Robert Yates 552-7053

Galaxy BBS 552-0974

Well, gang. Another month has come and gone, spring time is quickly coming upon us. We have been showing some very interesting things in our meetings. Last meeting we showed how to Lzh, arc, Un'lzh, Un'arc. We also showed how to un'zip, and un'zoo. This seemed to be an area of some confusion. We also had open for discussion any questions about NeoDesk 3.0.

Our attendance has been very good and we are still getting about 1 to 2 new members a month. We would like to increase this so the club will thrive. So tell all of your ST or 8-bit friends to call the board or bring them to the meetings. We have recently had several 8-bit people interested in the group. We are glad to see the enthusiasm. To join the club all you need is \$20 and you will receive full access to the Club BBS, subscription to AIM, access to the club Library. For times and dates of the next club meetings Call Lewis Midyette at (919)-828-4319. Or the club BBS at (919) 552-0974.



SALSA The ST Atari League of San Antonio, P.O. Box 18731, San Antonio, TX 78218-0731

SALSA is the user group that serves the ST/STe, STacy, and TT users of San Antonio. We also support the Lynx handheld game machine. Meetings are held on the second Tuesday of the month at the Balconies Hieghts Community Center, 107 Glenarm, right off of Fredricksburg road, from 7pm to 10pm. A SIG/Videogame night is sponsored by SALSA on the third Tuesday of the month at the same locale. Membership is \$20.00 with AIM and \$15 without Aim but with the clubs Newsletter. Subscribing membership is available for those unable to attend the meetings which includes Newsletter and discounts at local businesses that support SALSA. A Disk of the Month filled with the latest software is available at each meeting for \$2.00 along with copies from our extensive PD library and AIM disks.

Officers:

Tim Hebel, President (512) 656-5315
 Patrick Burch, Vice President (512) 655-8970
 John Burner, Secretary/Treasurer (512) 655-2542
 Kyle Miller, Software Librarian (512) 945-9469
 Russell Gibson, Hardware Librarian
 Thelma Sunvison, Public Relations

Salutations from SALSA. The Atari world is going well inspite of economic setbacks. Membership is up to almost 100 members and turn out to the meetings have been impressive. San Antonio now has four BBS that not only support the ST but are ran on STs as well.

Booji boy (512) 657-9254 SALSA support board ran by our own President Tim Hebel. Booji (Pronounced boogie) is the only ST music support board in the Alamo City.

Eagle's Nest (512) 656-3261

Excalibur (512) 523-0045 One of SA most popular BBS with a large message base including several nation wide F-nets.

Hacker's haven (512) 653-2911 Newest board in town. Features Znet news online.

I would like to persuade my fellow STers to help support the local businesses that support the Atari computer.

StarBase Atari, 1015 W Hildebrand, San Antonio 736-1405

International Computer Distributors (Atari Connection), 3010 Beacon Fld, San Antonio 675-3072

All Systems Go, 7271 Wurzbach, San Antonio 614-3768

Floyd Blunt's Atariville has officially changed hands to Marce and Cheryl Clark. The new owners of Floyds Atari-ville have decided on a new name for the store, Starbase Atari, although it will be awhile before any real name changing happens. Marce and Cheryl Clark are very enthusiastic ST supporters, and the place is really shaping up under their guidance. They plan to increase hardware inventory, add lynx cartridges and a larger variety of software to the store.

Rumors are circulating that All Systems Go will discontinue selling ST software in the near future but these rumors have not been substantiated. ASG also carries Lynx cartridges, IBM, Amiga software and movies. ASG has fallen under fire recently by national computer magazines for their store policies, but the owners have so far faced no ill effects and business has in fact increased.

If you have any additional info about places that sell ST stuff, please leave a message to one of the officers on Booji Boy or Excalibur BBS or drop a note to us at PO Box 18731, San Antonio, TX 78218-0731.

Patrick M. Burch Vice President



General Meetings are the 3rd Monday of each month at the North Park Recreation Center Social Room, 4044 Idaho Street at 7pm. ST/8-bit workshop meetings are on the 1st Thursday of each month at the North Park Adult Center, 2719 Howard Street at 7 pm. All meetings are open to the public. Annual SDACE subscription dues are \$18 which includes increased BBS access, AIM subscription, SDACE newsletter subscription, and reduced rates on the Disk of the Month. SDACE's address is PO Box 900076, San Diego, Ca 92190.

President Dan Phillips (619) 462-1289

Vice President Dean Smith (619) 582-6749

BBS - 24hrs, 300-2400 baud, 80 MB (619)689-8157



WAUG General meeting minutes of 2-11-92

The meeting was opened at 7:30 PM by VP Craig Harvey presiding in the absence of our President. Craig announced the availability of the new Supra V32/V42 9600 baud modem for a group purchase. Anyone interested should be prepared to ante up by the March meeting. His next announcement was the availability of tickets for the upcoming TAF Atari show in Toronto on April 4th and 5th. All interested parties should contact Craig.

Ralph Salmeron fired up a demo of Draw 7 XE from the January AIM disk. Contrary to the AIM listing, Ralph says that XE Basic is not required to run this program but 128K is needed. He showed us how Draw 7 could switch modes from graphics to magnified graphics for pixel editing to text mode for placing text. Draw 7 XE had enough features to keep Ralph happy but he did mention the lack of support for touch tablets and the inability to mix palettes. It does however have the ability to load many different popular file formats. Due to some hardware difficulties a full demonstration of the program's capabilities was not possible. The documentation for this program is on the AIM disk.

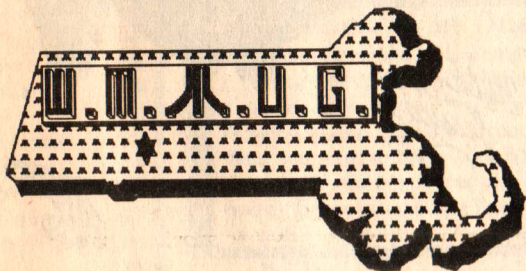
Bill Rayl brought the ST/TT program Chronos 3D for a demonstration of it's features. He explained to us that Chronos creates not the objects but rather animations with already created objects. Bill said that if you need to make the objects you may use Cad 3D or Lexicor's just released Rosetta. Chronos is a key frame animator, that is it lets you specify the first and last positions of the object and it does all the stuff in between. A quick six frame demo of a ball moving across the screen graphically illustrated just how this works. The first position and last position of the ball were all the Chronos needed to make it go across the screen. The morphing capabilities of Chronos were demonstrated effectively as Bill showed us a chess queen changing into a king on the screen before our very eyes. The only thing Chronos need to do this was a graphic of the queen and a graphic of the king. Once again, it did all the changes in between. The cycling feature of Chronos lets you move objects with different parts in unison. Bill showed this off with his own sunrise scenario where a sun rose over a mountain range changing the light and shadows as it went. Another great looking demo was a face literally rising out of a floor ala Terminator 2 done by the author of Chronos. Another demo of great interest was a conversion from an IBM animation file. A quick mention was made of Prism Paint which is Lexicor's paint program for use with the objects for Chronos. Bill's enthusiasm for Chronos was obvious since he had nothing but praise for it especially the documentation and included tutorial.

Members then asked questions about the length of animations that were possible with Chronos (depends on memory available), a particular background in one of the demos (done with Autodesk on an IBM and converted with Rosetta) and future enhancements (automatic shading-automatic tracking of an object by the lighting).

Mike Olin then presented the new WAUG library disks including two full game disks and a disk of utilities. Ralph presented us with an 8 bit library disk full of all kinds of different programs for the Atari Classic.

Our special guest Mike Drysdale of Team Computers took the floor to talk about some of the exciting new things available for the ST/STE/TT computers. A new 1.44M floppy drive and controller chip along with TOS 2.06 elicited questions from the members about upgrades, etc. Someone raised a question about the new GE Soft ram upgrade board for the TT that promises to make ram upgrades affordable. Mike said that it works well as far as he is aware. Members wanted to know about the new monitors that Atari has been making available. A new flat screen monochrome with a 14" screen is being released to replace the SM124 according to Mike. After Mike's fielding more Atari questions from the members the meeting was adjourned at 9:45 PM.

Respectfully submitted,
Dan Cable Secretary



From The President's Desk

Many people these days are worrying about Atari. Where their place is in the grand theme of things relative to computing. In these days where even the mighty IBM and MAC are feeling the crunch of slow computer sales and the sluggish economy it's hard to tell.

When I hear people running down Atari for not keeping place in the growing computer market place I too have to look at our aging machines. But when I look at my Atari I don't see a decrepit beast just yet, but I see a machine, that even in the face of a revolution of computer technology, and even in the fact that it has changed little from its original incarnation, has still managed to be better in many aspects to its MS-DOS brethren.

I ask for you to look at how long it took the IBM world and Microsoft to discover a Graphic environment. And even in the face of Windows how long it takes that program and many IBM's to perform a task done ever so simply on an Atari for all these years.

When you look at your machine and try to stem of the fear of obsolescence ask yourself this, "Does it do what I need" ?

In the case of my Atari it does. Thru excellent Telecommunication programs like STALKER and VANTERM I can keep up with the rapidly growing wealth of information on the local and long distance BBS's.

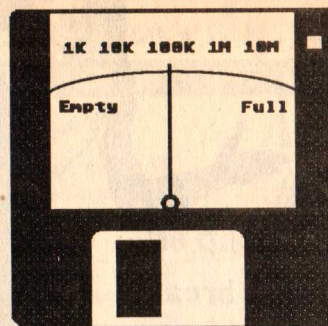
With Excellent DTP applications like Calmus and Pagestream I can do on my 8 MHZ Atari what others spend thousands to do on their platforms.

And yes there still are numerous Games I still play with alot more on their way soon including a WING COMMANDER like game called "EPIC".

Indeed my ST is far too active to see the Dust of my closet shelf yet. Ask the owners of a 286 clone if the same will hold true of their machines when they are seven years old !

See you next month.

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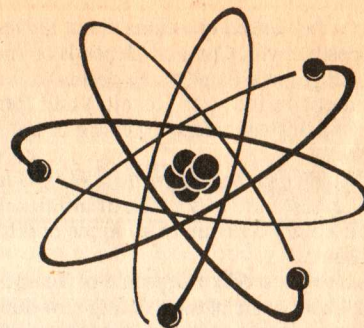
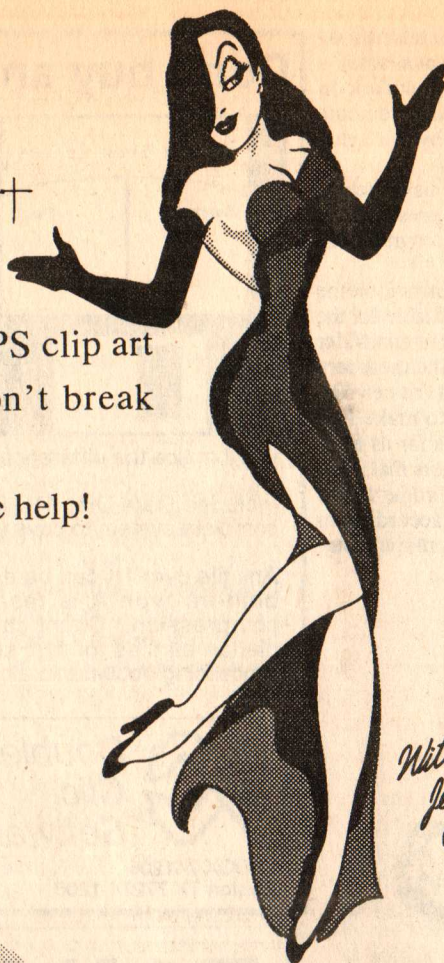
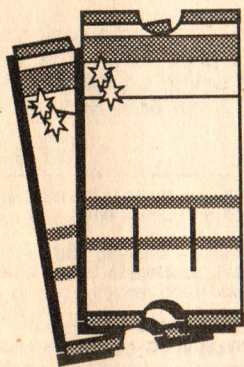
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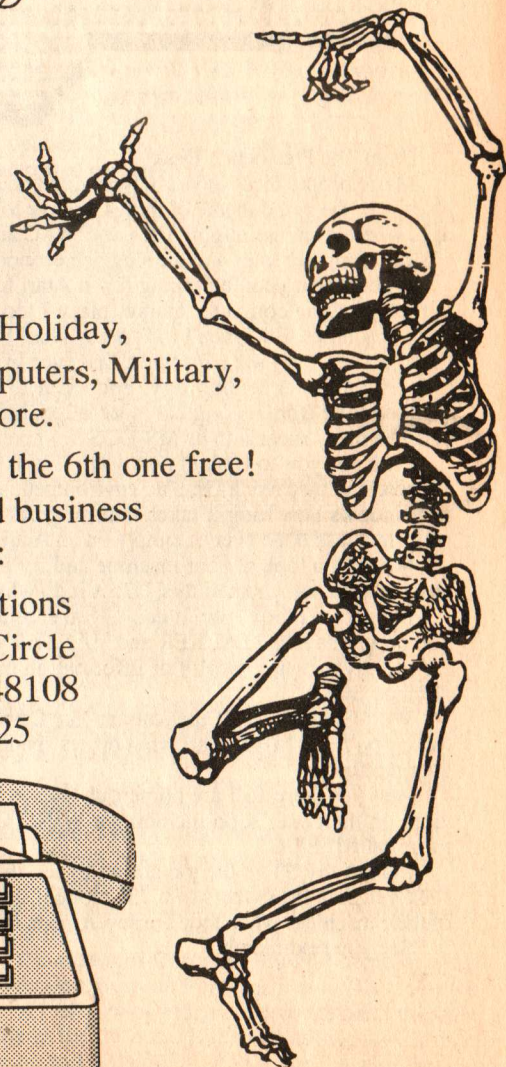
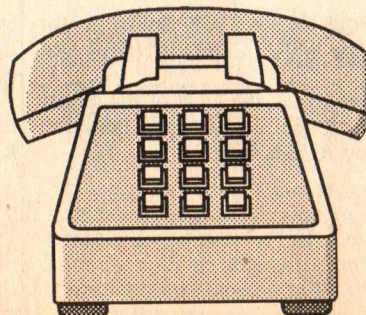
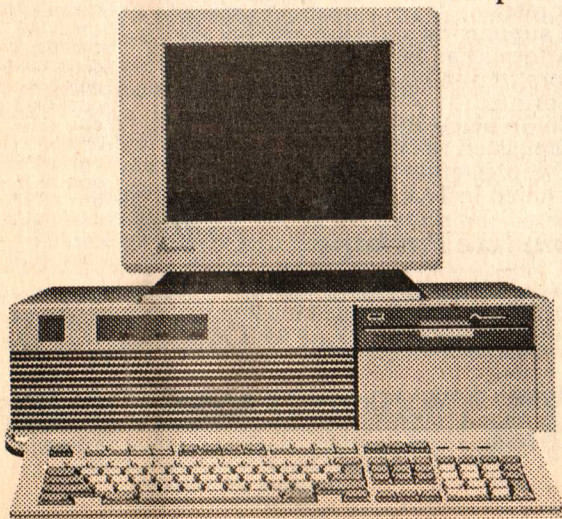
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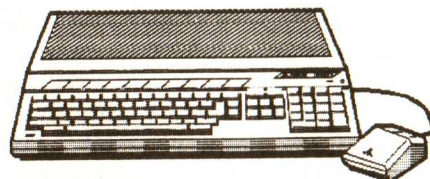
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Programming in Michtron Command Language

A Tutorial for Michtron BBS 3.0 SysOps

Jeff Wells

Welcome back. In our first article, we talked about some of the basics of programming in MCL. We talked about how all variables and string variables have a global effect. We discussed Labels and Subroutines, Loops and how to exit from Loops.

In this article, I originally planned to go into detail on the 32 unique System Variables and the 78 System Functions and Procedures and give definitions to the above and examples. But, since they are defined in the MBBS v3.0 manual, I've decided to get right into the programming instead.

Let's say you have an idea for a *new* program you want to write for your BBS. What you need to do first is to flowchart what the program is going to do. This task will only be as difficult, and as detailed, as you make it.

I am going to show examples of a Baseball game I wrote in MCL for my BBS. My flowchart was very simple and I used it for my plan of attack when coding this program:

```

Start of Program
Store Bbs Variables, Then Zero Out All Variables
List Credits
Display/Create Baseball Menu
If New Player, Create Files
Load Players' Files
Display Games Played Since Last Played
Display Both Team's Stats
Select Pitchers
Assign Variables
Start Playing Loop
    
```

Starting the Program

If you plan on allowing other sysops to have your program, you need to at least create a Variable list so that others have an idea of what you are doing. Here is the Variable list for MCL Baseball.

```

/* -----
MCL Baseball version 1.0
Program by Jeff Wells
Lone Star BBS
(817) 690-1993 (817) 690-5874
-----
System Variables      System Strings
=====
a                    a$ Coach
b Home Score         b$ Team Name
c Visitors Score     c$ Batter #1
d Type of Pitch      d$ #2
e Type of Bat        e$ #3
f Balls              f$ #4
g Outs               g$ #5
h Strikes            h$ #6
i                    i$ #7
j Hits for Home Team j$ #8
k Who is Fielding    k$ #9
(0=home,1=visitors)
l Hits for Visiting Team l$
m                    m$
n                    n$
o                    o$ Home Team File Name
p                    p$ Base Query in Bit Format
q Score by Inning, Home q$
r Score by Inning, Visitors r$ Base HIT Query in Bit Format
s                    s$
t                    t$
u Inning              u$
v Home Team Batter Number v$
w Visitors Batter Number w$
x                    x$ Visiting Team File Name
y                    y$ Home Score Line
z                    z$ Visitors Score Line
*/
    
```


Now, we have a foundation from which to work. We have a plan of attack—our flowchart—and we have our Integer and String Variables mapped out.

Storing/Zeroing Variables

Let's look at some code and discuss what it's doing.

```
Baseball::
log("Entered MCL Baseball...");
print("\f\nPlease Wait While I Save BBS Variables...");
x$ = "\\bbs\\baseball\\game";
str(y$,modem);
strcat(x$,y$);
strcat(x$,".bbl");
if(exist(x$))
    delete(x$);
p$=x$; /* you can change p$ to whatever you want */
str(d$,user_var0);
logfile(p$,d$);
str(d$,user_var1);
logfile(p$,d$);
str(d$,user_var2);
logfile(p$,d$);
str(d$,user_var3);
logfile(p$,d$);
str(d$,user_var4);
logfile(p$,d$);
str(d$,user_var5);
logfile(p$,d$);
str(d$,user_var6);
logfile(p$,d$);
print("Done!!\n");
a=0;b=0;c=0;d=0;e=0;f=0;g=0;h=0;i=0;j=0;k=0;
l=0;m=0;n=0;o=0;p=0;q=0;r=0;s=0;t=0;u=0;v=0;
w=0;x=0;y=0;z=0;
a$="";b$="";c$="";d$="";e$="";f$="";g$="";h$="";
i$="";j$="";k$="";l$="";m$="";n$="";o$="";p$="";
q$="";r$="";s$="";t$="";u$="";v$="";w$="";x$="";
y$="";z$="";
user_var0=0;user_var1=0;user_var2=0;user_var3=0;
user_var4=0;user_var5=0;user_var6=0;
print("DONE!!\f");
```

The first thing we do is to assign our beginning point. We create, in line 1, a Label called *Baseball::*. Note the :: trailing our label, this is how MBBS knows it's either a label or subroutine.

In line 2, we create an entry in the BBS log showing us that the user entered the program. I highly recommend doing this for two reasons. First, you can see who is accessing your game and how popular your game is on the BBS.

The other, and probably most important reason, is that if you also make an entry when the user has properly exited the program, you can see if they exited the program by hanging up (dropping carrier) on the system.

We then create a file called "game?.bbl" in the \bbs\baseball\ folder, where the ? is replaced by the modem number on which the user is connected. Since I run a multiline BBS, I tag the 'game' file with the modem number of the user playing, 0 = console and 1-3 representing the modem the user is using. This is needed so one user does not receive another user's user_var settings when they finish the game.

In line 8, we check to see if the game file already exists. If it does, that means a previous user called in on the same modem and played this game. Since we don't need that file anymore—in fact, we want to replace it

for the current user—we delete the file in line 9.

In our new game file, we store the values contained in *user_var0* to *user_var6*. I use these individual "user variables," which are built into Michtron's BBS, to do different functions for the user.

Once the user variable values are saved, we wipe the slate clean, zeroing out all variables and string variables. We also zero out the *user_vars*.

You will notice the above code uses a procedure called *log(sexp)* and one called *logfile(sexp1,sexp2)*. The *log()* procedure writes the supplied string to the BBS log file (ACTIVITY.BBS). The *logfile()* procedure is similar, except that it allows you to output a supplied string (*sexp2*) to a file of your own choosing (supplied in *sexp1*).

The other important procedures used in this code segment are *str(sexp,var)* and *strcat(sexp1,sexp2)*. As you can probably guess, *str()* converts an integer to a string and stores it in the string variable designated by *sexp*.

The *strcat()* procedure *concatenates* the *sexp2* string onto the end of the string contained in *sexp1*. For instance, let's say *a\$* contained the string "ABC" and *b\$* contained "DEF". After a *strcat(a\$,b\$)*, *a\$* would contain "ABCDEF". If, instead, we had done a *strcat(b\$,a\$)*, variable *b\$* would contain "DEFABC".

Displaying Credits

Let's look at how we display our credits and create and display the Baseball Main Menu.

```
if(exist("\\bbs\\baseball\\baseball.lst"))
    list("\\bbs\\baseball\\baseball.lst");
/* My Credits */
pause("\n\n\t\t\t Hit any key to continue");
```

We use the *exist(sexp)* function to see if the credits file is present. If it is, we display it using the *list(sexp)* function. Notice how the *list(sexp)* is indented. The reason I do this (and recommend it) is simple—that command will only execute if the *exist(sexp)* function returns a value of TRUE. You will notice I indent all my code that falls within conditional statements. This is common practice and makes your code much easier to read.

What's on the Menu?

Now, it's time (according to our "flow chart") to start working on our main menu. Here's some code:

```
z$ = "\\bbs\\baseball\\teams.bbl";
MAIN::
a$ = "12";
print("\fMCL Baseball Main Menu");
print("\n=====");
print("\n[1] Instructions");
print("\n[2] List MCL Baseball Standings");
```

Here, we assign *z\$* to the path and filename that stores all the players names. Then, we create a label called *MAIN::*. This is necessary when you create a menu, so you have a beginning point to return to after the user selects one of the choices in the menu.

String variable *a\$* is going to be used to test the keystrokes allowed in response to the menu. We set it to "12" for now, and we will add more command validations to it as the menu gets created.

The first line of the actual menu (the first print() statement) clears the screen (\f) and displays the name of the menu. Selections [1] and [2] are always going to be able to be displayed, so we insert those also. That is why we have the "12" in *a\$* that we assigned earlier.

```
if(exist("\\bbs\\baseball\\nohit"))
{
    print("\n[3] NO HIT Club");
    strcat(a$, "3");
}
if(exist("\\bbs\\baseball\\club400"))
{
    print("\n[4] 400 Club");
    strcat(a$, "4");
}
if(exist("\\bbs\\baseball\\club500"))
{
    print("\n[5] 500 Club");
    strcat(a$, "5");
}
if(exist("\\bbs\\baseball\\club600"))
{
    print("\n[6] 600 Club");
    strcat(a$, "6");
}
if(exist("\\bbs\\baseball\\club700"))
{
    print("\n[7] 700 Club");
    strcat(a$, "7");
}
if(exist("\\bbs\\baseball\\topbat"))
{
    print("\n[8] Top Batter in MCL Baseball");
    strcat(a$, "8");
}
if(exist("\\bbs\\baseball\\worstbat"))
{
    print("\n[9] Worst Batter in MCL Baseball");
    strcat(a$, "9");
}
```

What we did in the above code was to see if a file existed, and if it did, we printed the selection to the screen, which added a new line to our menu. Then, we used the *strcat()* procedure to add the command's initiating keystroke to our variable *a\$*.

```
print("\n[0] PLAY BALL");
print("\n\n[G] BAMF! (Goodbye)");
if(level == 4)
{
    print("\n[R] Reset the game, individual");
    strcat(a$, "R");
}
print("\n[Q] Quit to Main Menu");
print("\n\nEnter your selection. [0] ");
strcat(a$, "0GQ\r");
k = key_match(a$);
```

We finally add the menu item that lets us play the game—good idea I thought—as well as a way to log off the BBS from the game.

Then we use one of the unique System Variables, *level*. This variable contains the access level you have assigned to the user. If the person accessing the game is a *Wizop* (their level equals 4), then we add another command—Reset the game, individual. I added this so

sysops have the ability to zero out *all* or just one of the users' stats within the game.

We then add a command to exit back to the BBS—the DOORS menu in this case. A prompt to enter a selection is displayed, with the default enclosed in brackets. We then used *strcat()* again to add commands "G", "Q", and "\r" to *a\$*. The "\r" is the same as a carriage return. You'll see how we use this later to be the equivalent of typing "0" as the command.

We did not opt to use the *input(prompt,svar,len)* function here, as we only want to accept certain commands that we have built into *a\$*. Instead, we use the *key_match(sexp)* function to accept a keystroke from the user. This function only accepts the characters contained in the string variable passed to it—in our case, *a\$*. All other keypresses are ignored.

Once a valid keypress is entered, its ASCII value gets stored in the integer variable *k*.

Stats and More

This completes the building our menu. Now, let's look at how we pass control to different areas using the main menu commands.

```
if(k == '1')
{
    print("Instructions");
    list("\\bbs\\baseball\\baseball.ins");
    pause("\n\nHit any key to continue.");
    goto Main;
}
```

As mentioned above, the variable *k* holds the ASCII value of the keystroke entered by the user. When you enclose a character with single quotes (' '), MCL uses the ASCII value of the character. In the above if() statement, we could have used *if(k == 49)* and we would get the same result. Most people find it much easier to use characters rather than their ASCII codes, though.

Also, note the double equals signs (==). If we use a single equals sign, MCL will assign a value to the variable or string variable. The == is used for comparison only and does not change the value of the variable. It is very important that you remember this distinction.

For instance, if the condition *if(k = '1')* is used, it will *always* test TRUE, because you are setting *k* equal to 1 before testing. This is not the same as *if(k == '1')*, which checks to see if the value of *k* is equal to 1.

In the above code fragment, if the user pressed the number 1, we display "Instructions" on the same line as the prompt. We then display *BASEBALL.INS* and use the *pause(sexp)* function. This function displays the passed string and waits until the user presses *any* key. Once the user presses a key, we jump back to the label *MAIN*.

One other thing to note—conditional statements (*if*, *while*, etc.) are not trailed by a semi-colon (;), while procedures and functions must have a trailing semi-colon.


```

if(k == '2')
{
    print("List MCL Baseball Standings");
    print("\fName of Team          Coached by
Win Los   Pct Run Inn ERA");
    print("\n=====
=====\\n");
    list("\\bbs\\baseball\\standings.bbl");
    pause("\n\nHit any key to continue.");
    goto main;
}
if(k == '3')
{
    print("NO HIT Club\n\n");
    print("\fName of Player          Name of Team
At Bat Hit   PCT");
    print("\n=====
=====\\n");
    list("\\bbs\\baseball\\nohit");
    pause("\n\nHit any key to continue.");
    goto main;
}
if(k == '4')
{
    print("400 Club\n\n");
    print("\fName of Player          Name of Team
At Bat Hit   PCT");
    print("\n=====
=====\\n");
    list("\\bbs\\baseball\\club400");
    pause("\n\nHit any key to continue.");
    goto main;
}
if(k == '5')
{
    print("500 Club\n\n");
    print("\fName of Player          Name of Team
At Bat Hit   PCT");
    print("\n=====
=====\\n");
    list("\\bbs\\baseball\\club500");
    pause("\n\nHit any key to continue.");
    goto main;
}
if(k == '6')
{
    print("The 600 Club");
    print("\fName of Player          Name of Team
At Bat Hit   PCT");
    print("\n=====
=====\\n");
    list("\\bbs\\baseball\\club600");
    pause("\n\nHit any key to continue.");
    goto main;
}
if(k == '7')
{
    print("The 700 Club");
    print("\fName of Player          Name of Team
At Bat Hit   PCT");
    print("\n=====
=====\\n");
    list("\\bbs\\baseball\\club700");
    pause("\n\nHit any key to continue.");
    goto main;
}
if(k == '8')
{
    print("Top Batter in MCL Baseball");
    print("\fName of Player          Name of Team
At Bat Hit   PCT");
    print("\n=====
=====\\n");
    list("\\bbs\\baseball\\topbat");
    pause("\n\nHit any key to continue.");
    goto main;
}
if(k == '9')
{
    print("Worst Batter in MCL Baseball");
    print("\fName of Player          Name of
Team      At Bat Hit   PCT");
    print("\n=====
=====\\n");
    list("\\bbs\\baseball\\worstbat");

```

```

    pause("\n\nHit any key to continue.");
    goto main;
}
if(k == 'R')
{
    gosub maint;
    goto main;
}

```

If you have only one command to execute after an *if* statement, MCL does not require you to enclose it in curly braces ({}). In the examples above, we executed several commands per *if* statement, so these commands must be enclosed so MBBS knows where to start and end for that condition.

Most of the code used here is now "old hat." The only new command we issued is the **gosub** command. This command transfers control to a subroutine (which we'll define later). Once the subroutine is executed, control is returned to the line directly under the **gosub** call.

The basic difference between **gosub** and **goto** is that MCL automatically returns to the line following the **gosub** once the subroutine is finished; **goto**, on the other hand, is used to jump to a label with no direct way of returning to the jumping off point.

```

if(k == 'Q')
{
    print("Quit to Doors Menu");
    execute("DOORS");
}
if(k == 'G')
{
    print("BAMF! (Goodbye)");
    execute("BYE");
}

```

We use the **execute(sexp)** procedure here. This procedure is used to run other compiled MCL files, transferring control to the executed file. With the **execute** function, you can only pass the filename with *no* path-name and *no* extender. MBBS assumes the program is in the system drive's BBS folder and will add the .MCL extender. If the file does not exist in the BBS folder, a fatal error occurs and MAIN.MCL is loaded.

Once you use the **execute** command, there is no way to get back to the calling program, unless you use **execute** again. You can not use the **return** command to take you back to the calling program, as you can in subroutines defined within the calling program.

(Beware of creating one program to call another that, in turn, calls the original program. Unless you're careful, you could get into an "infinite loop" where you continuously jump back and forth between the two programs!)

That's it for this month's installment. See you next time!



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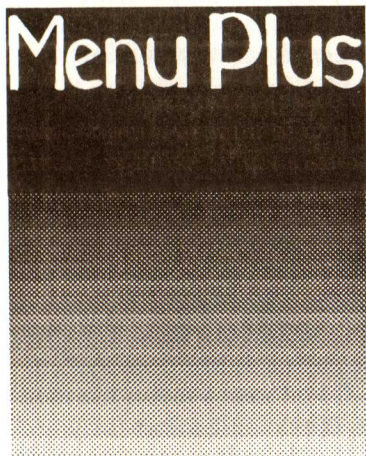
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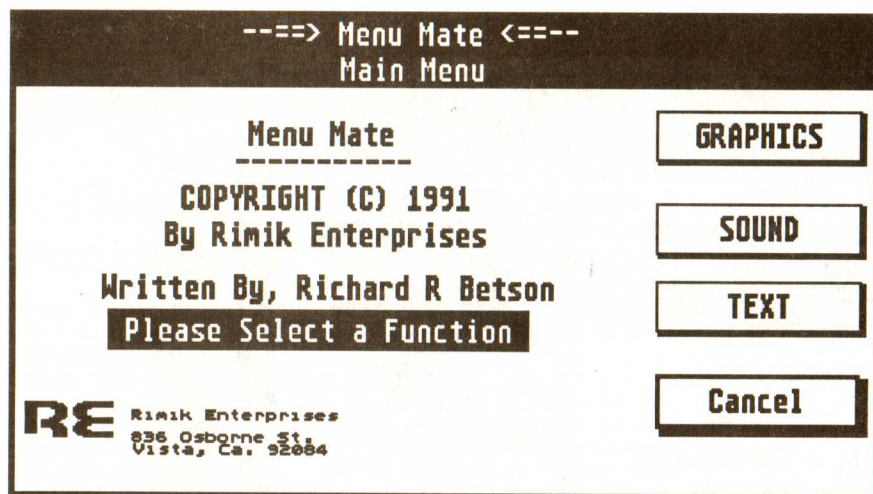
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H. Earl Hill
SAGE



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Getting Started

The Menu Plus disk (unprotected) contains the folder Menu Plus (containing MENUSHEL.PRG, BASECODE.EXE, MENUMATE.ACC, MENU-MATE.RSC, MENUPLUS.MNU, MEMORY.PRG) and the folder HARDDRIV with STARTGEM.INF.

The manual contains instructions on installing Menu Plus and Menu Mate on a floppy disk drive or a hard disk, plus information on the correct movement and allocation of the files. Instructions are also given for AUTO booting Menu Plus (with or without STARTGEM) on various versions of TOS.

To start Menu Plus, you can run MENUSHEL.PRG. When Menu Plus or Menu Mate are run, they ask for the allocation of memory -- 150K on a color system or 40K on a monochrome system. This query greets you before the Main Screen is displayed.

Working with Menu Plus

When you first run Menu Plus after the selection of the memory allocation, you see the Main Screen. The functions are mouse selectable only. For the purpose of this review, let's first consider the program running functions available from the Main Screen.

The Main Menu has two entry windows for filenames. The left window columns are for setting up the main program categories (such as Utilities, Ap-

plications, Graphics, etc.). There are 13 menu selections and each has 13 sub-menu selections attached to it. The mouse cursor is used to activate the desired entry window.

The sub-menu contains program names and program path information from which the programs are actually run (or launched). The blanks are filled-in, so to speak, by use of the button functions (for Entry or Editing) of "ADD TO" Main Menu or Sub-Menu. File entry, as well as selecting path information for a particular cell, is relatively straightforward. Filenames and paths are saved to disk.

On the Move

The MOVE function allows you to move a menu cell anywhere within a menu window. To move a menu cell, you click on "MOVE" and the mouse cursor turns into a hand. Then, you click and continue to hold down the mouse button over the menu cell you would like to move. While still holding down the mouse button, you move the menu cell over any one of the menu cells within the window. Once you have positioned the menu cell where you would like to place it, you stop pressing on the mouse button. Menu Plus automatically shuffles the menu cells to accommodate the change.

L/C/R

The L/C/R function lets you justify the contents of a menu cell either Left, Center or Right.

Load, Save and Delete

LOAD MENU loads a Menu Plus menu information file from disk. Each menu file can hold 169 different programs and their path information, system colors and your password. If you load a menu file that was saved in monochrome, the default colors for your system will be displayed. The default menu information filename is "MENUPLUS.MNU".

SAVE MENU lets you save your present menu information to a file. This includes main menu names, sub-menu names and path information, system colors and your password and password status (active or inactive). DELETE MENU lets you delete either main menu or sub-menu cells. You can also delete whole sub-menu or main menu categories.

Launch or Run?

The LAUNCH SELECTION function allows you to launch (run) a program that's already included in a sub-menu. To use this function, you first select the main menu and the corresponding sub-menu cell. Next, you click on "Launch Selec." (or click the right mouse button) and the program will be run.

RUN PROGRAM allows you to run a program just

by selecting it through the file selector. This is helpful for programs you do not want to add to a sub-menu and would just like to run once. To use this function, you simply click on "Run Program." A file selector appears and you choose the file you would like to run.

Clicking on the "File Selector" button at any time will bring up the file selector. This is most useful for owners of UIS III or other replacement file selectors. Clicking on "OK" or "CANCEL" exits this function.

The Menu Bar

A special function selection on the Main Menu screen is the Menu Bar. The Menu Bar allows access to other Menu Plus functions not available from the Main Screen area. It also allows access to accessories that are in memory. The Main Menu is shaded while you are using the Menu Bar.

The Atari symbol menu heading provides access to any accessories in memory as well as an exit to the Main Screen area.

The System menu allows you to set the following system functions:

SET COLOR: This menu selection lets you set your computer's color palette. Once you select "Set Color," a dialog box appears. Using the slider boxes, you are able to select a color. The color controls range from 0 to 15 (on an STE or MegaSTE) or 0 to 7 (on an ST or Mega) for Red, Blue and Green. **SET BLITTER:** This function allows you to turn the BLITTER chip on and off. If you do not have a BLITTER chip in your computer, this function will not affect your computer's performance.

SET TIME AND DATE: This function sets the system time and date.

MEMORY: Clicking on EST. MEMORY shows an estimate of how much free memory is available to run a program. Clicking on FREE MEMORY shows the current memory available in your computer.

The Print/Show menu lets you access the various viewers/editors available within Menu Plus. From here, you can print or view text files; show Degas, NeoChrome or Spectrum 512 pictures; and edit and play ST-Replay sound files. (Note: Only Degas monochrome pictures can be viewed in monochrome mode.)

Under the Misc/Menu heading, you can access options to print out all of your menu information and set your password and password status. If you set a password and select "ACTIVE," the Menu Plus security system is armed. This function locks out anyone from using your system unless they have your password. (Make sure to write down your password in a safe place, just in case you forget it.)

If you would like to deactivate the security system, select "INACTIVE" and click on "OK." Be sure to use the "SAVE MENU" function so that your password status is updated.

Using Smart Play

Many computer owners are now discovering digitized sound samples available on BBSes across the United States. You probably own one or two games that use some type of digitized sound. Some animation packages now have the ability to incorporate sound samples in their sequence of files. This makes for some great effects. The applications are limitless.

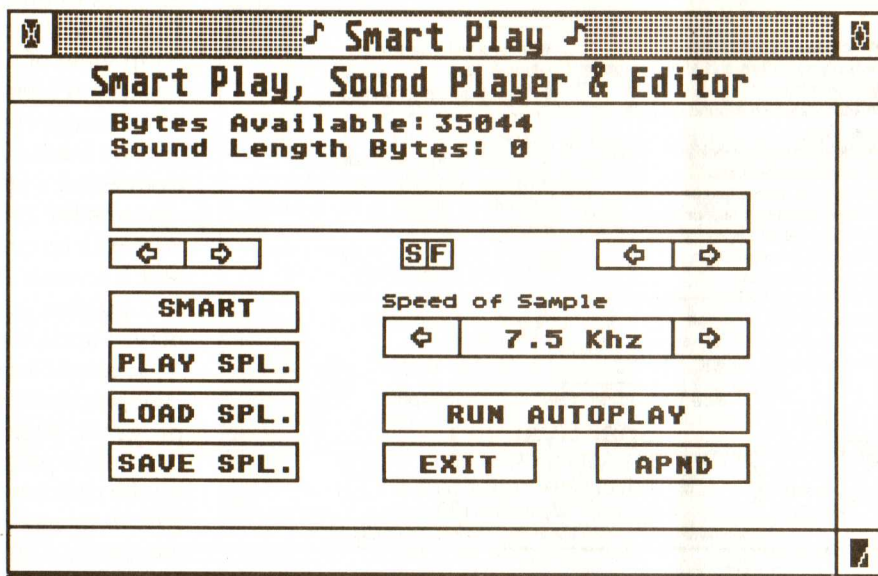
Smart Play has basically two different functions: editing and playing of sound sample files. With Smart Play, you can edit and save any sound file you load into memory.

There are two ways to play sound samples with Smart Play. The first is to simply load the sound sample, set the play speed and select play. The second way is to load a sound sample into memory and append the first byte in the sample to contain the play speed of the sample. By using the latter method, you can play sounds one after another using yet another feature called "AutoPlay."

In order to have sound samples load and play in the correct speed or "Khz," you must append the current sample in memory. You select the proper speed setting (you are really setting the proper frequency, but speed is easier to relate to). Then you select the "APND." function and then save the sample.

By "appending the sample," you are changing the first byte in the sample file. Later, when you choose the AutoPlay function, Smart Play looks at that first byte to set the speed at which the sample should be played. This does not affect the quality of the sample! Other sample players/editors can use appended samples from Smart Play with no ill affects.

AutoPlay works similarly to slide show programs for picture files. You simply pick the drive and



path/folder name and choose if Smart Play should look for that appended byte for speed adjustment (Auto Speed). Once this is done, Smart Play will load any file with the extension ".SND". This extension is commonly used for sound sample using the appended byte method.

Sound Editor

Using the sound editor in Smart Play is very simple. First, you load a sample into memory. Two small boxes with arrows facing in opposite directions allow you to edit your sample. The box above the arrows is used to gauge your sample. This box represents your entire sample no matter how large or small it may be. By clicking on the arrows, you can cut out sections from your sample and save them.

After you have begun editing, you can select "PLAY SPL>" to hear the edited sample. When you have finished editing your sample, you can save it by simply selecting "SAVE SPL".

The Manual

The documentation for Menu Plus is the standard fold-over page, 21 pages in all. It is divided into six main sections and is well printed. However, this is about the only positive thing that can be said about the

manual. It is filled with glaring misspellings, as well as grammatical, punctuation and organizational errors.

Another problem with such a short manual is that it spends time touring the Main Screen (Chapter 3) and then devotes a separate chapter to menus and sub-menus. This leads to duplication and makes the overall concept difficult to follow.

The manual would probably have been better organized as Main Screen; Menu Bar; Plus Features -- the View/Prints, etc.; Sound Features; and the Accessory Version.

The Tips and Tricks chapter could also use a major expansion. The manual section on Getting Started should give a listing of the files on the disk and their purpose. The cover shows a screen dump of the Main Menu, but there are no other screen dumps within the manual itself.

Any revision of the manual would appear to need a major rewrite, adding screen dumps, expanding the text, going to a numerical section layout and proofing for spelling and grammatical errors and reorganizing.

Improvements

Where to start? Menu Plus, as it presently stands, needs a lot of modification and improvement. A lot of these (see the summary following) are those that similar menu programs (such as CodeHead's HotWire) already have.

Menu Plus could support keystroke alternates for the mouse selections, plus hotkeys for running programs. It could use a configuration file that senses resolution, so memory allocation prompting would not be necessary every time it is used.

It would be nice if the justification function (L/C/R) could be made selectable for all files listed in the menu windows, as well as just the highlighted file.

Conclusion

Overall I found Menu Plus awkward to use. It is in need of major improvements such as using keyboard hotkeys to give an alternative to intensive mouse use. The manual is in need of a complete rewrite.

In view of the near saturated market for alternative desktops, Menu Plus as a saleable product for Rimik has a tough road ahead. Besides the well entrenched and well-established commercial competition such as CodeHead's HotWire (the One Plus Ultra of menuing systems for running programs), there are other more versatile commercial programs which have built-in text Viewers. Besides these, there are the shareware and public domain programs to view/print text files, play sounds, etc.

It might have been better if Menu Plus had just concentrated on a full-featured application launching program. Menu Plus has the look and feel of an un-optimized program and, additionally, is seriously hurt by the deficiencies of the manual. It's also pricey at the \$39.95 list as compared to the powerful, optimized competition such as HotWire.

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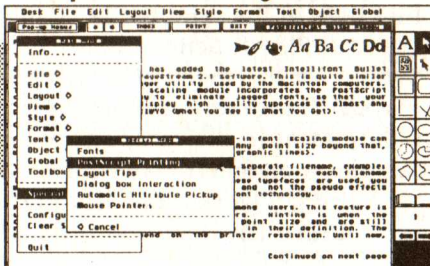
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Knightmare



Kevin Slate

"Welcome to your Knightmare" as the oracle on the wall proclaims.

It's *Knightmare* by Mindscape and it's the latest in Dungeons and Dragons style role playing games. Based on a popular British television show, *Knightmare* is destined to become a cult classic.

In the game, you pick four heroes and begin your quest in

search of four objects—a shield, a sword, a cup and, ultimately, a crown. When you first start the game, you find yourself (and your party) walled in with a single "coal" railway car to bring you to one of four wooded landscapes. The actual quests take place in these "prisons" and it's there your Knightmare truly begins.

Your first task is to determine how to bypass the tree creatures. These creatures guard the entrance ways to each of your four quests. Each quest takes place in a different world and poses a wide variety of perils. The search for the shield has its twists and turns but is not exceptionally difficult. But, by the time you begin your second

quest, for the sword, things start getting Knightmarish.

Just as in the popular *Dungeon Master* from FTL, you pick up objects to store or use while trying to maintain sufficient levels of "health," "stamina," and "magic." These levels are monitored by three bar graphs next to each hero.

Movement is achieved by clicking on arrow icons or by using the numeric keypad, which tends to be somewhat uncomfortable. Unfortunately, the keyboard's arrow (cursor) keys aren't used, perhaps in an attempt to avoid an exact FTL-lookalike. Nevertheless, the interface is easy to use and doesn't prove too difficult to master.

Items you find are stored in a "backpack" which you access by clicking the right mouse button while pointing at one of your heroes. You can also click on a "four party" icon to view all four backpacks' contents at once.

Throughout the game, there are weapons to collect, food to store and eat and objects to be used as you make your way.

The animated sprites are done quiet well and prove to each have their own character. The outdoor scenery is adequate, as are the "dungeons." If you're not satisfied with the game's colors, you can modify them to your liking.

One nice feature is the ability to save up to eight game positions. This is very helpful if more than one person plays the game. (*Dungeon Master* lacked this ability, wasting valuable disk space.)

Knightmare is destined to be a hit. If you are a *Dungeon Master* fan, you'll love *Knightmare*. It fits right in with FTL's adventures as well as its *Captive* counterpart.



It isn't every day that one comes across a "game" that has real, practical value. Even more unusual is to find a "game" that can make you money. Blackjack Plus 3 (BJP3) from Musicode is such a program.

To call Blackjack Plus 3 a game is a gross understatement of this software's purpose. It would be more accurate to call it a simulation. Blackjack Plus 3 realistically simulates a casino Blackjack table, just like you'd find in Las Vegas or Atlantic City.

The program *teaches* you how to play better at Blackjack, increasing your chances of winning.

As the manual's introduction states, "Learning the basic strategy and taking advantage of the most liberal casino house rules will all but eliminate the casino's edge. This kind of play alone will greatly reduce the losses usually encountered by beginning players."

At the same time, Blackjack Plus 3 is a whole lot of fun to play.

Strategies, Strategies

Blackjack Plus 3 comes with a built-in basic strategy and a "count betting" strategy. You can also set up your own custom strategies and test them to see how well you do against the dealer. The manual recommends a couple of very good books on playing Blackjack that contain useful counting strategies.

In the game, you can "sit down" to a table with up to six other "players." Each player can be run by you or by the computer. A special FEEDBACK mode warns you whenever you diverge from whatever strategy you've chosen. In BACKGROUND mode, the computer goes into overdrive, playing approximately 100 hands in 30 seconds! This mode is very useful for testing strategies over the long haul.

Blackjack Plus 3 can handle up to seven different playing strategies at one



time. These strategies can be counting or non-counting. A "Strategy Table" is used to pretty much cover any possible occurrence. For instance, if you've got a hand that adds up to 10, and the dealer is showing a 9 (or any other card), the strategy table tells whether to hit, stand, double down, split or surrender.

Along with the normal Strategy Table, Blackjack Plus 3 has an "Alternate Strategy Table." Depending on how the game is progressing, BJP3 switches between these tables. The process can get pretty complicated, but BJP3's manual does a good job of explaining all the intricacies.

The strategy tables also have the ability to determine how much your next bet should be based on the last hand's result (whether you won or lost). The options are simply astounding.

Playing Around

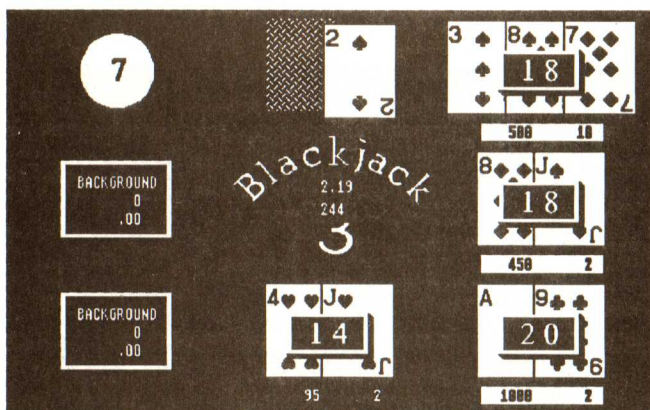
For all its features, the software is extremely easy to use. If you just want to play Blackjack (and perhaps hone your skills a little), you can skip setting up strategies altogether and get right to playing! The tutorial section at the beginning of the manual shows you how to get started right away.

Another nice feature in BJP3 is that you can use mouse, joystick or keyboard to perform just about every gameplay function.

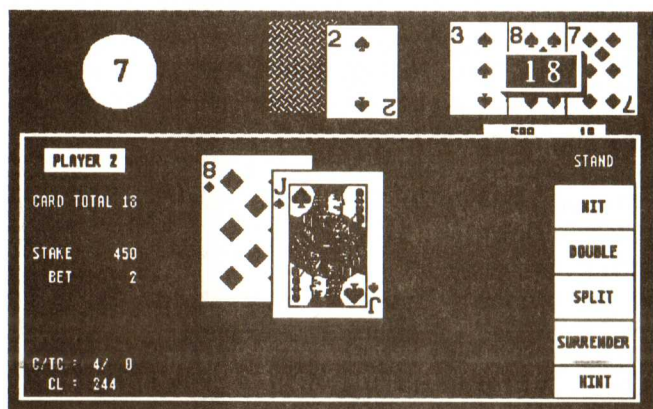
Play Options

Blackjack Plus 3 is not your typical, stripped down Blackjack game. At the Game Setup screen, you can set a num-

Bill Rayl



ber of options. These options (which includes setting the aforementioned player strategies) make BJP3 the most realistic game of Blackjack you'll probably ever play on a computer.



Along with the more mundane settings of game speed and each player's "stakes," you can set various House Rules and "penetration." The penetration setting allows you to set the percentage of cards that will

be dealt from each deck or shoe (multiple decks).

The House Rules settings include rules for when you can double down, whether you can double down after a split, whether surrender is allowed, etc.

All of these options can be saved to a setup file—set them once and forget them, or change them later to match your favorite casino!

BJP3 also has the ability to keep a log file of your gaming sessions. This log file captures info on all the hands played, as well as statistics on the number of winning, losing or tied hands; total hands played; total amounts wagered; net amount won or lost; percent amount won or lost and more. This log file option is extremely useful when playing in Background mode, as it gives you hardcopy evidence of your strategies' performances over time.

Conclusions

The BJP3 manual does a good job of explaining the multitude of options this software presents. A section on Counting Strategies and separate sections on setting up both counting and non-counting strategies are filled with a wealth of information.

The software is not copy protected (it does ask you to supply words from the manual), so it can be installed on a hard drive. It runs on any ST in medium or high resolution and works perfectly fine on the TT in those ST resolutions as well.

Whether you're planning a trip to Las Vegas to break the casino or just want to play a very good Blackjack game, Blackjack Plus 3 is just the ticket!

Musicode

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NBR RESET

COUNT

TABLE

INSURANCE

UNIT BET

MAX BET

COUNT BETTING STRATEGY	
COUNT	x UNIT
.02	2.00
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.04	4.00
.05	5.00

	2	3	4	5	6	7	8	9	10	ACE
62	H	H	H	H	H	H	H	H	H	H
53	H	H	H	D	D	D	H	H	H	H
9	D	D	D	D	D	D	H	H	H	H
10	D	D	D	D	D	D	D	D	H	H
11	D	D	D	D	D	D	D	D	D	D
12	H	H	S	S	S	H	H	H	H	H
13	S	S	S	S	S	H	H	H	H	H
14	S	S	S	S	S	H	H	H	H	H
15	S	S	S	S	S	H	H	H	H	H
16	S	S	S	S	S	H	H	H	H	H
72	H	H	D	D	D	H	H	H	H	H
73	H	H	D	D	D	H	H	H	H	H
74	H	H	D	D	D	H	H	H	H	H
75	H	H	D	D	D	H	H	H	H	H
76	D	D	D	D	D	H	H	H	H	H
77	S	D	D	D	D	S	S	H	H	S
78	S	S	S	S	D	S	S	S	S	S
79	S	S	S	S	S	S	S	S	S	S
79	P	P	P	P	P	P	P	P	P	P
22	H	P	P	P	P	P	H	H	H	H
23	H	H	P	P	P	P	H	H	H	H
44	H	H	H	D	D	H	H	H	H	H
66	P	P	P	P	P	H	H	H	H	H
77	P	P	P	P	P	P	H	H	H	H
88	P	P	P	P	P	P	P	P	P	P
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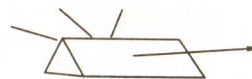
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TOS 2.06

Disk Management System

FOR THE 8-bit

Ellen Lentz (ACCT)

Disk Management System by Ron Fetzner and Stan Schenfeld of the Ol' Hackers Atari Users' Group is a Public Domain, two-disk disk library cataloging system for the XL/XE Classic Atari. It supports the Atari and Epson or compatible printers, although instructions for changes are given in the documentation so any dot-matrix printer can be used.

The package basically consists of two programs, the Quick Cataloger and the Full-Feature Cataloger, with supporting programs for Cleaning Up your disks, printing Disk Labels, Disk Envelope Labels and Title Labels for Commercial disks.

Documentation for the programs is excellent. It appears on the back side of each disk, and can be printed in either 40-column or 80-column format.

The Full-Feature program is written in Atari BASIC. It allows you to auto-catalog your disks. For each file, you can specify data such as description, type of file, source and whether it's BASIC or ML. Commercial disks may also be recorded. All records can be updated, and an Inquiry into all records may be made in three different modes.

The catalog can also be sorted by any of seven different fields. The user has a choice of disk drives and database names for cataloging and sorting. The software can handle up to 500 records and the data is saved automatically.

The Quick Cataloger and sup-

porting programs are written in Turbo-BASIC XL (supplied with the programs) and uses a RAM-Disk to store the catalog, which is then copied to a regular disk at the end of a session. It can handle up to 810 files. A count is given of your files as you catalog each disk so you know when you're approaching the maximum.

If you think you have more files than these programs can handle, simply organize your disks into categories such as Public Domain, Commercial, Personal or Mixed, and catalog each category separately.

You must supply a disk name, 5 characters long, which will be recognized by either catalog program. This name is then written to the disk, so you must have at least one free sector on each disk and the disk must not be write-protected.

The disk name can be all numeric, or a combination, such as PD for Public Domain and a number 1-999 (i.e., PD001). Suggested names are PP (Personal Programs), CM (Commercial programs), MX (Mixed programs). You can use the individual option for Commercial programs and the disk name will not be written to the disk.

The Clean Up program allows you to remove unwanted files from your disk and assures that you have one free sector left for the disk name. It provides some DOS functions such as Erase, Lock, Unlock, Rename and Format.

Print Directory prints each file name with a description line that you may want to use in the Full-Feature Cataloger. The Text Reader function will load and display any file except Graphics files. You may

then be able to identify the type of file you are working with.

The program is stored in the RAMdisk, so if you go to DOS to copy a file to another disk, you can go back to the program by typing (in BASIC) RUN D8:CLEANUP.

The Sticker program prints one 15/16x3.5 label with eight disk designations you can cut apart to put on your disks. Or, you can print a 4x6 index card which you then put in the envelope with your disk.

The Disk Label program prints an alphabetical listing of your files on 15/16x3.5 pressure-sensitive labels in condensed mode. It will print 27 files on each label, for a total of 54 files per disk. It will not print DOS.SYS, DUP.SYS or RAM-DISK.COM. It asks for a Sort and will not print if the answer is NO.

The Disk Envelope Label program prints an alphabetical listing of your disk directory. You can glue or tape this onto your disk envelope or print it on a 4x6 index card. It will print up to 64 file names, ignoring DOS.SYS, DUP.SYS and RAMDISK.COM. If an error occurs during printing, type in CONT and the program will usually continue.

The Title Label program prints a three-line disk label for commercial disks or other disks that are based on one subject. It can also be used to print address labels. It prints in Caps, but can be set for lower-case by pressing the Caps key. It centers each line, and can print multiple labels.

The Quick Cataloger program uses the RAMdisk D8: to store the cataloged files. It reads the directory for all your files and prepares an Alphabetical or Numerical file,

showing disk name, filename and number of sectors. It stores all your files in the master file DISKFILE, so if you are sub-dividing your files into PD, CM, etc., you must use a separate disk for each category.

If you are beginning a session, you would choose Option 2—Load File. For further additions to the file in another session, you must first go to DOS, copy DISKFILE to D8:DISKFILE, then choose Option 3—Add New Disks. To get back to the Quick Cataloger from DOS, choose Option L and load AUTORUN.SYS. There are very good prompts for this in the program itself.

To catalog the disks, remove any write-protect tabs from the disks and insert one after another into Drive 1, following the prompts, until all disks have been cataloged. You supply a 5-character disk name as described above. If there are no free sectors left on the disk, or no files on the disk, you will get the message 'REMOVE WRITE-PROTECT TAB' and you will not be able to catalog that disk in the normal way. You can add or erase Individual disks and the program will not write to the disk.

When you have finished cataloging, choose the Sort File option and give a Sort-file name. Once the sort is complete, you can either Display the file or Print it. The software gives the number of files you have cataloged, to be used in subsequent sessions when you want to add new disks.

Always end your session with Option 9—END. This will prompt you to go to DOS and copy your D8:DISKFILE to D1:DISKFILE. You may save the other files if you wish, but they are not necessary.

The prompts in these programs are excellent. You can specify the density of each disk and the printer you will be using. The label programs all allow you to adjust your labels first.

Since the Quick Cataloger program is easier to use, it would be nice if someone would write a small program to convert the DISKFILE from the Quick Cataloger program to the format of the Full-Feature program. Then you could use both programs with only one pass of your disks. The Full-Feature program has an Inquiry option which is lacking in the Quick-Cataloger, although you do have your sorted print-outs to which you can refer.

This system is highly recommended for those who wish to get their disk files organized. For further information or comments, you can contact Ron Fetzer at 22 Monaco Ave., Elmont, NY 11003. For copies of the system, please send a check for \$6 (made out to Ron Fetzer, the club's treasurer) to: Ol' Hackers AUG, Inc. c/o Alex Pignato, 3376 Ocean Harbor, Oceanside, N.Y. 11572.

Topics are still needed for articles, so if you have a program you would like to learn how to use, or one you would like reviewed in AIM, send a copy of the program and all documentation to:

Ellen Lentz, 512 Pauly, Perrysburg, OH 43551, (419) 874-7196.



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ANSWERS, Tips And RELEVANT INFORMATION

HARDWARE HACKING

Paul Alhart (AFED)

When I was young, I loved to take things apart. I wanted to see how things worked or, in some cases, see why they didn't work.

My grandfather kept me well supplied with old machines and gadgets to tinker with. I always assumed he did this because he shared my "What makes it work?" interest. Most likely he was really trying to keep me too busy to think about dissecting Grandma's new TV.

Beginning Hacking

In any case, I eventually learned to put most of the things back together and even got some of them to work again. I also learned that with a little modifying or "hacking," some things could actually be coaxed into working better, or more to my liking, than before. At last, true justification for taking good, new, functional things apart! Like Peter Pan, I would never have to grow up.

A Better Mouse Trap

I never did outgrow my hacking urges. My brand new Atari 1200XL wasn't in the house more than 15 minutes before I had it apart and spread all over the living room floor. I wasn't yet sure how it worked, but I was sure I could make it work better.

Over the years since then, my entire system has been apart and modified many times. Nothing has been spared, from the printer to the drives. And yes, it does work

better now, or at least more to my liking, than ever before.

My latest hack I call an Atari 2000XL+—an 800XL inside a 1200XL. Why? I have always liked the 1200XL keyboard the best.

No other model, or other brand for that matter, has a keyboard I like better. I had also been using a 256K 800XL to test out the Ultra Speed Plus OS from Computer Software Systems.

"Home Brewed" Computer

When it finally dawned on me that I could not part with Ultra Speed or my 1200XL keyboard, there was only one thing I could do. A little investigation showed this would not be just a simple plug in modification. The 1200XL keyboard has built in decoder chips while the 800XL has its keyboard decoder chips on the motherboard.

Room was another consideration as the 1200XL and 800XL motherboard layouts are completely different. Besides hacking, a lot of hack sawing on the case and RF shield was required to get everything to fit.

The end result, however, is a computer that looks like a stock 1200XL except for a cartridge slot added to its top face. I was surprised to find that the 1200XL function keys are supported by the 800XL OS and still work as before. I am using the 2000XL+ to write this article and it sure feels good to have my favorite old keyboard to type on again.

New Projects

What's next? How about warp-

speed for my Rana disk drives? Or expanding the RAM in my printer buffer? Whatever it is, I'll let you know, but first I need to take time and tell you what the Ultra Speed Plus OS is and why I couldn't live without it. Look for a review of US+ in A-T-A-R-I in the near future.

Till then, enjoy, and keep those cards and letters coming my way to let me know what you want to hear about.

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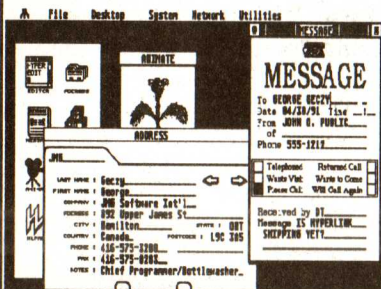
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Spectre GCR Modifications

George Richardson

[Ed: George Richardson and Gadgets by Small have given us permission to run this article in the hope that it helps GCR owners experiencing the problems outlined in this article. There are other articles and text files appearing that claim to fix these problems. Please, DISREGARD those other articles as they may contain information/procedures that could cause you problems!]

As with any hardware modification, Atari Interface and/or its staff cannot be held liable for any damage incurred from your performing this modification. If you are unsure of your ability to perform these modifications, DON'T DO THEM YOURSELF!]

The Spectre GCR has a number of problems when used with an Atari TT. This is caused by the fact that the 68030 processor has begun to change the state of the address lines by the time the cartridge select line goes false, something that does not normally occur in the regular ST computers. These problems can include the following:

- Getting the "defective ROM" message at boot time
- Difficulty formatting GCR (Mac) floppies
- Difficulty writing to GCR (Mac) floppies
- Difficulty reading GCR (Mac) floppies

The floppy problems can be detected by using the GCR test program included with Spectre.

These problems may, in some lesser degree, occur on machines with 68030, 68020 or 68000 accelerators. They might also occur on machines that have heavy loading on the address bus, like a Mega ST with Blitter, Moniterm card and GCR, or a GCR and six EPROM TOS set.

There are *three* separate fixes that can be done to the GCR. They should *all* be done to get best performance with the TT.

I should note that these are only GCR hardware fixes; there are some problems with the TT and Spectre 3.0 that will be corrected by future Spectre software releases. An example of this is the problem using floppy disks with the 68030 caches turned on. The current solution for this is to get one of the Macintosh desk accessories that allow you to turn off the caches so you can use floppies when required.

There are also some hardware problems with some TTs that are *not* caused by Spectre's software or the GCR's hardware. You should run the floppy drive test on the GCR tester to determine if your drive and system is up to snuff. If it doesn't pass, no amount of fixes to the GCR or Spectre software will help you.

Also, there is a small fuse in the power supply line to the cartridge port on the TT. If this fuse is blown, the GCR cartridge will not function. Check with a voltmeter to be sure the GCR is getting power. Pins 7 and 14 of U4 are a good place to check with a voltmeter. Pin 7 is the negative side and pin 14 is the positive side. There should be about 5 volts DC between these pins.

The Fixes

There are three parts required for the GCR fix—no substitutes please! Any substitution of parts can produce side effects, like the complete inability to use the GCR.

The three required parts are:

- One 74LS04 chip (NOT an S04, ALS04, HC04, AS04 or 7404)
- One 100pf capacitor (35 Volt, monolithic ceramic, one of the little blue or yellow blobs. Do not use a disk cap!)
- One 1K Ohm, 1/4 watt 5% tolerance resistor

OK, the first step is to trim all but pins 7 and 14 on the 74LS04 short. Note that I said *short*, not off. If you cut off all of the thin part of the lead so that none of it protrudes below the base of the chip itself, that will do fine. This is only so that none of the pins touch any of the pins on the chip we're going to solder it on to. Pins 7 and 14 are the power pins, and we'll use those both to get power from another chip, and to hold the 74LS04 onto the GCR.

Now, locate U4 on your GCR. If you hold the GCR so that the gold connector is facing you and the disk connectors are on your right, U4 is the third chip in from the left on the top edge of the GCR. (We'll also use this orientation to locate the rest of the chips we'll be dealing with.)

Position the 74LS04 on top of U4 so that their pins line up, 1 to 1, 2 to 2, et cetera. This means the notch or mark on the ends of both chips must be facing the same way. Solder the 74LS04 chip's pins 7 and 14 to pins 7 and 14 of the U4 chip, so that the 74LS04 chip is riding piggyback on U4. These are the only connections to be made to U4. all other connections will be made from the piggyback 74LS04 to other chips.

Find U3, just to the right of U4. Cut the trace connected to pin 9 of U3. It's located on top of the board. Then, connect a wire from pin 8 of the 74LS04 chip to pin 9 of U3.

Find U2, just to the right of U3. Connect a wire from pin 9 of the 74LS04 to pin 9 of U2.

Find U6, on the lower left side of the board. Cut the trace connected to pin 12 of U6. This trace is also on

the top side of the board. Then, connect a wire from pin 10 of the 74LS04 to pin 12 of U6.

Connect a wire from pin 11 of the 74LS04 to pin 11 of U2.

Now the tough stuff. Solder the 100pf capacitor between pins 2 and 3 of the 74LS04. This can be done in such a way as to allow the capacitor to lie flat against the top of the chip. Then solder the 1K resistor between pins 3 and 7 of the 74LS04. Make sure that these parts don't touch any other pins on the chip.

Connect a wire from pin 1 of the 74LS04 to pin 10 of U2.

Then, find U10, which is just to the right of U6. Cut the trace that connects to pin 10 of U10, leaving the trace between pins 9 and 10 intact. All of these traces are on the underside of the board. Finally, connect a wire from pin 4 of the 74LS04 to pin 10 of U10.

Run the GCR test. Boot into Mac mode. If you did everything correctly, you should now be running fine.

On the off chance that you're not, but everything seems to be wired correctly, short out the leads of the capacitor and try it again. If things work better, try substituting a 120pf or 150pf cap for the 100pf.

If you would like to do this modification but don't have the experience or know anyone who does, Merlin Group can do the modification for you for \$25.

[George Richardson of Merlin Group, Inc. is the designer of Gadget's by Small's MegaTalk board and SST 68030 upgrade board. He can be reached at (201) 998-4441 or via Email on CompuServe at 75275,1363 or via GENie to G.RICHARDSO1.]

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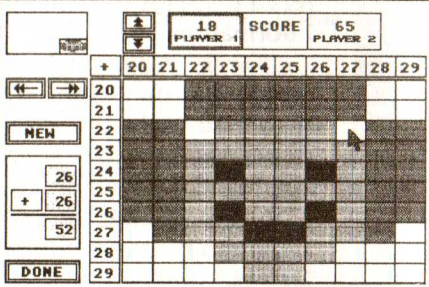
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Delphi—A Great Place to Be

Gordon Meyer

Most of us are familiar with those friendly, yet diverse, collections of Atari users we call user groups. Folks with interests ranging from desktop publishing to games to MIDI-based music all come together in one place, bound by their mutual attachment to the Atari computer. A user group meeting is somewhere novices can find help with unfamiliarities and 'old-timers' can catch up on what's new in the Atari community.

And, fortunately, for those of us who have been bitten by the telecomputing bug, there is an on-line service that is very much like a user group. Beginning as an on-line encyclopedia in 1982, Delphi has grown into a solid resource for a wide variety of computing and non-computing interests. From photography to environmental concerns, Delphi offers a place for modem users to come for information.

The ST Advantage is the home for Atari users on Delphi. (The ST Advantage also includes special topics and databases for Atari 8-bit users.) Managed by Clay Walnum, former editor of ST-Log magazine, the ST Advantage has grown to be one of the busiest areas on Delphi.

A continual supply of new program files streams into the Databases. Both public domain and shareware releases are available, as well as several on-line magazines. All new files are placed in a special Recent Arrivals database for about a month, before being merged into one of the 14 regular databases. This makes it easy to see what's new since the last time you were on-line.

The ST Advantage area sees its fair share of message posting, on subjects from using a multi-sync monitor to tips on the latest games. The friendly atmosphere is much like your local user group. Frequently, long time users answer questions from those who have

just gotten their STs. Sometimes it's a question about how to use Delphi more efficiently. And occasionally, it doesn't have anything to do with Atari computers or Delphi at all.

Another feature that makes the ST Advantage more like a user group is the weekly Conference (CO). Held every Tuesday evening at 10PM Eastern time, members gather in the Conference area and share the immediacy of a real-time get-together with their fellow Atari users. Several developers make regular visits to the weekly COs, and their participation always makes for an interesting evening.

As perfect as all this might seem, it is important to note that Delphi is a pay service. You are charged for your time on-line. However, Delphi has the lowest rates in the business, as little as one dollar an hour.

There are two plans. Basic access service costs \$5.95 per month, and includes one hour of on-line time. Additional hours are just \$6.00, for access at any modem speed. And there is no sign-up fee for basic access.

If you find you spend more than 3 hours a month on-line, you might consider Delphi's 20/20 Advantage Plan. For \$20 a month, you receive 20 hours of on-line time, with additional hours billed at just \$1.20! Now that's power without the price!

There is a sign-up fee of \$19.95 for the 20/20 Advantage Plan, but you'll save that much in access charges your first month. Advantage Plan hours run from 7 PM until 6 AM on weekdays, and all weekend, so there is plenty of opportunity to use up those 20 hours, and more.

The 20/20 Advantage Plan hours can be used anywhere on Delphi, so you can feel free to explore all the system has to offer. Delphi has SIGs devoted to almost every computer type, as well as

several machine-independent computer SIGs, like graphics and desktop publishing.

But Delphi doesn't limit itself to computing. The Photography Forum is there for photographers, both amateur and professional. The Environment SIG offers a 'green' place for interested Delphi members. The Science Fiction & Fantasy SIG has regular Conferences, where well-known SF&F authors stop by to visit with their readers.

The GameSIG is hosted by Scorpio, a well-known writer for a variety of gaming publications. It's a great place to get hints on computer games, as well as non-computer games. The World of Videogames offers the latest news and tips for video-game enthusiasts and is sponsored by the staff of VideoGames & Computer Entertainment magazine.

There's even a special area hosted by the comedians Penn & Teller, where almost anything can happen!

Delphi also offers all the usual on-line services. There are on-line encyclopedias, travel services, financial information services, on-line news and sports and several specialized databases. You can send ASCII fax


messages via Delphi for a modest fee. And there is an extensive on-line shopping service.

On the 20/20 Advantage Plan, you pay just \$1 an hour for access to almost everything on Delphi. There are a few special surcharged areas, but even with the surcharges added on, the access rates are still very reasonable. And you are always notified before you enter such an area, so you don't have to worry about accidentally racking up extra charges.

Delphi's atmosphere is laid-back and relaxed. If you post a question about a problem, it will most likely be answered within a day or two, by someone with expertise to share. Even Atari celebrities are readily approachable and happy to answer questions, hear comments or, sometimes, just chat.

Delphi isn't some formal, stuffed-shirt on-line service. It's more of a T-shirt and jeans place, where you can sit back and be yourself. See you on-line!

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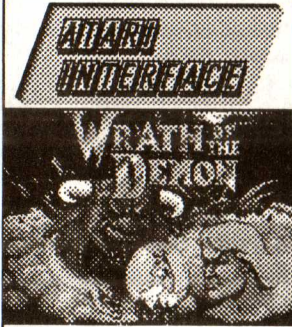
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MullerGEM

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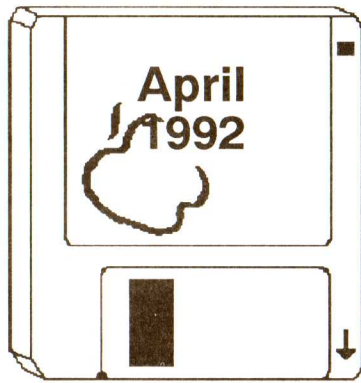
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3487 Braeburn Circle, Ann Arbor, MI 48108.





AIM Mac/Spectre Disk of the Month

Each AIM Mac/Spectre Disk of the Month is a double-sided disk packed with some of the best PD and Shareware programs available each month. The disks are available in either Macintosh or Spectre formats. All files are self-extracting Compactor Pro archives. Just double click to extract!

We have a number of HyperCard stacks this month. These files, in most cases, require HyperCard version 2.0 or higher.

Here is a short description of the files contained on the April '92 Mac/Spectre Disk of the Month:

Auto Maintenance—A HyperCard 2.0 stack that allows you to track your automotive expenses.

Bar Codes—Ever wonder what those Bar Codes you see on packages really mean? This HyperCard 2.0 stack will tell you.

Hyper PhotoFile—If you're a photographer (or someone who has lots of pictures) this HyperCard stack helps you keep track of everything. This stack runs under HyperCard 1.2.2 or higher.

Now, on to the non-HyperCard stuff!

AppSizer—A utility to help you adjust the memory usage of programs running under Multifinder. Great for solving some conflicts.

Measure 1.7—An application to convert different units of measurement. Handles Linear, Area, Volume, Weight and Temperature conversions. Supports such things as converting Acres to Hectares, Gallons to Liters or British Gallons (and vice versa) and Fahrenheit/Celsius/Kelvin temperatures.

ZoomBar—An init that allows you to shrink application windows to a small bar. Very useful when running under MultiFinder or when your desktop is getting a bit too cluttered! Can automatically shrink and expand windows with a single click.

Open-Wide 2.6—This init modifies your system's file dialogs to allow wider filenames. Now you can see or type in full 31 character file names without scrolling a tiny little section in a dialog!

Simpsons Init—This one's just for fun. This archive contains an init that displays the whole Simpson family, in icon form, when you startup your "Mac." Has built-in digitized sound, too.

Mombasa 1.1—A Gunshy/Shanghi (Mah Jongg) type game. Very well done. Much better than Gunshy 1.2.1.

Toxic Ravine 1.1—Orlando Pool's Toxic Ravine Cleanup and Rescue is another game from the author of Mombasa 1.1. Nicely done with pretty good graphics. Can you save the world from the destructive genetic waste in the Toxic Ravines?

Eliza—A Macintosh version of an old favorite. Tell your troubles to your Mac...er...Atari. This version supports digitized speech (using MacinTalk) and can be used as a small, no frills word processor.

MacinTalk—An Apple system extension that allows digitized speech. Simply place it in your system folder and reboot.

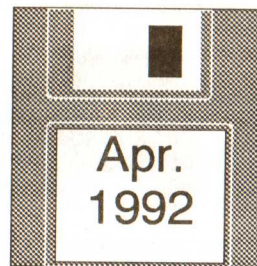
MineSweep 2.01—A game where the object is to clear a mine field as quickly as possible. The game includes its own help file.

Readers can purchase this disk by sending \$6 (\$5+\$1 s/h) to Unicorn Publications, 3487 Braeburn Circle, Ann Arbor, MI 48108, or call (313) 973-8825 and have your Visa or MasterCard ready. Please specify the April '92 Mac/Spectre Disk and which format when ordering.

AIM

ST/Mega/TT

Disk of the Month



All files on this disk are self-extracting archives created with Double Click's Self-Extracting ARC program DC SEA! To use these programs, simply double click the files. Then, click on Extract and select the drive/folder to which you want the extracted files saved. Click on Verbose to get a list of the files in each archive or Exit to abort. Here's a short description of the files on the April '92 disk. For more complete docs, see the text files contained in most of these archives.

ARKCON17.APP—Arkade Controller 1.7 controls sending FoReM BBS files to games, command lines, data file creation, doc file viewing, game file viewing, utility programs for games and more. All set up with a simple setup script. Designed for Express ST BBS 1.72 or higher. Shareware.

EDHAK23D APP—EdHak 2.30 demo. Fully functional as an editor for QuickCIS, but limited to a 4K edit buffer. When used by itself, it will not save to a file or disk sectors. Adds roughly 20 new features since version 2.25, including ability to function as a capture buffer for STalker (distributed by Gribnif), buffer conversion to/from hex, support for Atari clipboard for block saves/merges, expanded help screens, auto-indent and much more.

EMPIRE20.APP—Galactic Empire on-line game for Michtron's BBS 3.0. Another great MCL game written by Jeff Wells.

FZT_D211.APP—FreeZe Dried Software Terminal 2.11. This version is faster, adds background dialing and more. FzDSTerm is the only currently available terminal package for the ST/TT line that properly handles ANSI. TT Compatible in ST and TT Resolutions. Shareware. [Ed: See the review in this month's issue!]

MTALK105.APP—MicroTalk 1.05 is an on-line reader/reply program for Qmail for the PC and Turbo BBS or MaxiDoor for FoReM. Message bases chosen are scanned, compressed and downloaded. Later, you can read and reply off-line! Fully GEM based with multiple windows for switching message bases, user defined macros, text block commands, text export, clipboard support, full mouse or keyboard operation and much more. Freeware.

SEEKER.APP—Gold Seeker, a Lode Runner-type game with moveable trap doors, exploding bombs, diagonal slides, moving sidewalks, controllable force fields and an elevator. Allows you to create your own screens. Comes with 32 screens! Color only.

SNOFITE.APP—A great Shareware game from Larry and Kevin Scott. Even in the summertime, you can now enjoy a good snowball fight! Throw snowballs or slushballs and build snowmen in this fun two-player game. Color only. Works great on the TT in ST low resolution.

TTTIMERS APP—Two programs for fixing/finding problems with system clock speeds. CHECKRTC compares elapsed time according to the Real Time Clock with the elapsed time as measured by the 200Hz system tick counter. It reports any differences in terms of seconds/day lost or gained. TTTIME is a CPX module from Software Development Systems that allows you to set your system clock to run slower or faster. Requires XCONTROL.ACC. TTTIME can be used on any ST/TT machine, while CHECKRTC works only on the TT.

VENDOR.APP—VENDOR.ACC is a mini-database that comes with a datafile containing name, address, phone and CompuServe user ID info for software and hardware vendors that service the Atari community. Future updates to the VENDOR.DAT file will be available on CompuServe.

The following files were submitted by TLC Software's Tom Hayslett. Tom has been a major Shareware author and ST supporter for many years. Some of his programs have appeared on past ST disks. Here are the latest versions of just a handful of his many fine programs.

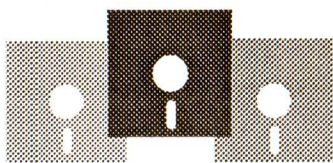
TLC_FIXR.APP—The File Fixer allows easy searching and replacing of ASCII text strings within programs. It will load and search/replace up to 20 files. Great for shareware authors that personalize their programs. ACC or PRG. Shareware.

TLC_FORM.APP—The Formatter is a disk formatter that formats backwards, can do a 'hard verify' and formats using the 'dead sector' scheme to make disks read/write faster than twister format. It will detect drive B: and allow auto formatting of two disks. ACC or PRG. Shareware.

TLC_NAMR.APP—The File Namer allows you to use any of the STs extended character set in your filenames (i.e., copyright or Fuji symbols). ACC or PRG. Shareware.

TLC_PLAY.APP—The Sound Machine loads and plays digitized sound files from SoundOff!, ST Replay, MasterSound, DigiSound, and more! You can reverse, stretch, squeeze, amplify, or soften sounds as well as change speeds. Allows endless looping and saving modified sounds in several formats. Shareware.

Readers can purchase this disk from their local AIM Participating user group or by sending \$6 (\$5 + \$1 S/H) to Unicorn Publications, 3487 Braeburn Circle, Ann Arbor, MI 48108 or call (313) 973-8825 and have your Visa or MasterCard ready. Please specify the April '92 ST/Mega disk when ordering.



8-bit (Classic) Disk of the Month April, 1992

Each AIM 8-bit Disk of the Month is a single-sided, single density "floppy" packed with software. To extract files in the ARC format, you need the UNARC.COM utility. To decompress files with a DCM extension, you need DISKCOM3.UTL. Both programs are available from most BBSes, user groups or you can purchase the April/May '91 AIM 8-bit Disk.

Here's a short description of the files on the April '92 8-bit disk:

LOAN.ARC—A BASIC program for calculating various loan options. Documentation gives concrete examples of the types of questions and calculations this software can handle. Submitted by Kevin Packard and WNYAUG.

INVEST.ARC—This BASIC program, a companion of sorts to LOAN.ARC, does a good job of answering practical questions about investments. Documentation also gives concrete examples. Submitted by Kevin Packard and WNYAUG.

PSINDEXER.ARC—A program to produce a list of the names of Print Shop Icons in ASCII format so that they can be printed out. Docs are included.

SUPRINDX.ARC—SuperIndex and IndexPrint, two programs for cataloging your diskette library. If you need to get your disk library in order, these BASIC programs are just what you're looking for. Submitted by Michael Bennett.

VIEW83.ARC—VIEW8.APP is a Graphics 8 picture viewer for the Diamond GOS Cartridge 3.0. Uses the Diamond cartridge's file selector routine and looks for files with the extension of .GR8. Requires Diamond GOS version 3.0. Written by Kevin Packard (WNYAUG).

UTILS1.DCM—Side 1 of a collection of disk utilities written by Les Wagar. Programs include DISK—a file loader with DOS functions;

DISKUTIL—a disk editor with file restore, sector copying and other nifty features;

DISKNAME—a program for adding titles to or personalizing of disk directories;

FREEZAP—a utility to set disks to reports 000 free sectors; and

VTOCKEY—a VTOC tester and rebuilder for damaged disks. Simply decompress and boot Side 1 to access the programs or boot Side 2 (see UTILS2.DCM) to print the documentation.

SIDE 2

RECORD.ARC—A Diamond GOS accessory that adds background music to most .APP programs. This accessory allows you to turn on and off the motor of a Program Recorder. The audio track of the cassette can then be heard through the monitor. Requires Diamond GOS and an Atari Program Recorder. Written by Kevin Packard (WNYAUG).

SSS.ARC—The Atari Sampled Sound System contains programs to convert, play and edit the many sampled sound files available for computers. One program requires Turbo Basic. Shareware from IPC Software.

UTILS2.DCM—Side 2 of the Utilities Disk from Les Wagar. This side contains complete documentation for all the programs, along with a documentation printer program. Uncompress to Side 2 of your newly-created Util. disk and boot from this side to autorun the documentation program.

Readers can purchase this disk from their local AIM participating user group or by sending \$6 (\$5 +\$1 s/h) to Unicorn Publications, 3487 Braeburn Circle, Ann Arbor, MI 48108 or call (313) 973-8825 and have your Visa or MasterCard handy. Please specify the April '92 8-bit Disk when ordering.

ALABAMA

Birmingham ACE
5822 5th Terrace S.
Birmingham, AL 35212
Alan Brewster (205) 591-9906
Meet: Vestavia Hills Public Library
Day: 2nd Mon. Time: 7PM
Dues: \$15/Regular, \$25/Advanced
CPU: Atari 8-bit and ST/Mega/TT
BBS: Matrix BBS, Co. #7, (205) 323-2016
Matrix BBS, (205) 251-2344
Misc: Advanced includes AIM 8bit or ST monthly disk

ARIZONA

Phoenix Area ST
PO Box 56413
Phoenix, AZ 85079
Mike Aubrey (602) 870-8360
Meet: Room #101, Devry College, 2149 W. Dunlap Ave., Phoenix, AZ.
Day: 2nd Sat. Time: 10-12PM
CPU: ST/Mega/TT
BBS: ST Base (602) 285-9246, RDS (602) 841-7196, Wild Thing (602) 277-8225

South East Valley Atari Connection
PO Box 662
Chandler, AZ 85224
Marc Dyer (602) 897-0314
Meet: Dobson Ranch Branch of Mesa Public Libraries
Day: 3rd Sat. Time: Usually 10AM
Dues: \$12
CPU: Atari 8-bit and ST/Mega/TT
BBS: (602) 833-9216
Misc: Reduced ST/8-bit library prices, club BBS access.

CALIFORNIA

ACC Encompassing Suburban Sacramento
PO Box 1354
Sacramento, CA 95812
Bob Drews (916) 423-1573
Meet: SMUD Training Building, Classroom B 1708 59th St., between Folsom Blvd. & R St., off Hwy 50.
Day: 1st Wed. Time: 7:30PM
CPU: Atari 8-bit
BBS: ACCESS BBS, (916) 428-8662

Atari Federation
PO Box 5367
Vandenberg AFB, CA 93437
Phil Rominger (805) 736-7147
Meet: Vandenberg Federal Credit Union, Vandenberg Village branch, Lompoc, CA 93436.
Day: 1st Mon. Time: 7PM
Dues: \$10/single, \$15/family
CPU: Atari 8-bit and ST/Mega/TT

Bay Area AUG
3691 Eastwood Circle
Santa Clara, CA 95054
Joe Fischer (408) 988-3065
Meet: Agnew Development Center Auditorium, Lafayette & Montague Exp. Santa Clara, CA.
Day: 1st Mon.
Dues: \$20
CPU: Atari 8-bit, ST/Mega/TT and Portfolio
BBS: (408) 986-0215

Bakersfield ACE
PO Box 40203
Bakersfield, CA 93384
Tim Hobbs (805) 837-2726
Meet: Pizza Hut, 3017 Wilson Rd., Vons Shopping Center
Day: 3rd Tue.
Dues: \$18/yr Full, \$12/yr Regular, \$6/yr BBS
CPU: Supports Atari 8-bit, ST/Mega/TT, Mac, IBM and Portfolio
BBS: (805) 831-5350

Diablo ACE
c/o J. Dickerson, PO Box 673
Diablo, CA 94528
Dan Howlett (510) 827-3805
Meet: Contra Costa County Water District Bldg, 1331 Concord Ave, Concord, CA.
Day: 1st Thu. Time: 7PM
Dues: \$20/yr
CPU: Atari 8-bit and ST/Mega/TT

Fresno Regional Atari Computer User Support
2167 Richart Ave.
Clovis, CA 93712
Tom Hancock (209) 885-2817
Meet: Four Seasons Mobile Home Park Recreation Room, Fresno, CA.
Day: Last Sat. Time: 6PM
Dues: \$20/yr or \$10/semi-annually
CPU: Atari 8-bit
BBS: (209) 251-5338 3/12/2400
Misc: Membership includes club disk of the month/newsletter and AtariUser

MIDI Atari User Group
1848 N. Gramercy #302
Los Angeles, CA 90028

Real Atari Maniacs
PO Box 112
Camarillo, CA 93011
Timothy McCoy (805) 482-4788
Day: 3rd Wed. Time: 7:30PM
Dues: \$25
CPU: ST/Mega/TT
BBS: (805) 987-6985
Misc: Member of ACENET consortium, active at the Glendale show.

San Diego ACE
PO Box 900076
San Diego, CA 92190
Dan Phillips (619) 462-1289
Meet: General: North Park Recreation Center Social Room, 4044 Idaho St. ST/8-bit Workshops: North Park Adult Center, 2719 Howard St.
Day: Gen.: 3rd Mon., Workshops: 1st Thu. Time: 7PM
Dues: \$18/yr
CPU: Atari 8-bit and ST/Mega/TT
BBS: (619) 689-8157 3/12/2400
Misc: SDACE newsletter, increased BBS access

San Leandro Computer Club
PO Box 1506
San Leandro, CA 94577-0374
Bob Woolley (415) 865-1672
Meet: San Leandro Community Library, 300 Estudillo Ave.
Day: Main: 1st Tue., ST: 2nd Mon. Time: 8PM
Dues: \$20/yr
CPU: Atari 8-bit and ST/Mega/TT
BBS: Key System (415) 352-5528
Misc: SLCC Journal, access to print and PD/Shareware disk libraries.

Sacramento ST User Group
PO Box 214892
Sacramento, CA 95821
Mark Warner (916) 344-8320
Meet: Pac Bell Auditorium, 2700 Watt Ave.
Day: 2nd Wed. Time: 7PM
Dues: \$24/yr
CPU: ST/Mega/TT
BBS: ST-Keep (916) 331-6153, (916) 729-2968
Misc: Club newsletter, free raffle ticket at each general meeting, membership disk.

Salinas Valley ACE
672 E. Romie Lane
Salinas, CA 93901
Gary Klugman (408) 758-4894
Meet: Salinas Community Center
Day: 1st Tue. Time: 7:30PM
Dues: \$12/yr
CPU: ST/Mega/TT
BBS: BitStream (408) 449-2150
Misc: Raffles, free disk of the month

The Educators' Atari Club
PO Box 1024
Laytonville, CA 95454
Pete Loesser (707) 984-8048
Meet: Operates by mail, members are spread all over the world.
Dues: US: \$25/yr, Foreign: Inquire
CPU: Atari 8-bit and ST/Mega/TT
Misc: TEAC newsletter. 8-bit and ST educational disk library.

Yolo Atari Club
1129 Fordham Dr.
Davis, CA 95616-0926
Eric Hays (916) 756-5496
Meet: Call or write for meeting time/place
Dues: \$8/yr
Misc: PD library access, Yackity-YAC newsletter.

COLORADO

Atari Clubs of Denver
5407 W. 4th Ave.
Lakewood, CO 80226
Guy McDaniels (303) 238-2366
Meet: ACD/STIG: Aurora Public Library, 14949 E. Alameda Ave. STarfleet: Pamona HS, 8101 W. Pamona Dr.
Day: ACD: 1st Tue.; STarfleet: 2nd Fri.; STIG: 3rd Tue. Time: 7:00 PM
CPU: Atari 8-bit and ST/Mega/TT
BBS: (303) 343-2956 3/12/2400
Misc: ACCD is an umbrella group for ACD, STarfleet and STIG.

Pikes Peek and Poke ACE
PO Box 17779
Colorado Springs, CO 80935-7779
Steve Leser (719) 576-3357
Meet: T.J. Maxx Center at Rustic Hills
Day: 8-bit: 1st Tue., ST: 4th Thu. Time: 7-9PM
Dues: \$20/yr family
CPU: Atari 8-bit and ST/Mega/TT
BBS: Laser BBS (719) 527-1374
Misc: Club has a Hayes 300 baud and Atari SX-212 1200 baud modem for loan to members. AtariUser and AIM ST and 8-bit Disks available at each meeting.

CONNECTICUT

Central Connecticut Computer Club
127 Pinnacle Rd.
Bristol, CT 06010
Rich Scheidel (203) 589-3738
Meet: 127 Pinnacle Rd., Bristol, CT.
Day: 3rd Wed. Time: 7:30PM
Dues: \$25/yr normal, \$30/yr family
CPU: Atari 8-bit and ST/Mega/TT

ST Atari Road Runners
15 John St.
Ansonia, CT 06401
Madelon Wilson (203) 735-6711
Meet: Greater New Haven State Tech. College, 88 Bassett Rd., North Haven, CT.
Day: 3rd Thu. (exc. Aug.)
Dues: \$20/yr
CPU: ST/Mega/TT
BBS: (203) 421-4861

DELAWARE

Central Delaware ACC
3117 Walnut St.
Dover, DE 19901
CPU: Atari 8-bit and ST/Mega/TT

FLORIDA

Atari Boosters League East
PO Box 1172
Winter Park, FL 32790
Hadley Nelson (407) 671-0317
Meet: Orlando Public Library, Palm Magnolia
Room 101 E. Central Blvd., Orlando FL
Day: Last Sun. Time: 1:30-4:30PM
Dues: \$12
CPU: Atari 8-bit and ST/Mega/TT
Misc: Access to the ABLE Program Library
(ABLE PLUS) and ABLE AID
newsletter.

Pinellas ACE
2439 Moorehaven Drive East
Clearwater, FL 34623-1615
Alan Frazer (813) 791-0912
CPU: Atari 8-bit
BBS: Tut's (813) 797-8449

STARFACE
2312 Ironstone Dr. E.
Jacksonville, FL 32216
S. Michael Hallack (904) 646-0567
Meet: La Miranda Apartments off Powers
Ave., Jacksonville, FL.
Day: 1st & 3rd Tue.
Dues: \$15/yr
CPU: ST/Mega/TT, Mac and Portfolio
BBS: Lief's World (904) 573-0734
Misc: Free PD/Shareware disk library access,
quarterly newsletter.

Tampa Bay Atari Addicts
5918 Otis Ave.
Tampa, FL 33604
Butch James (813) 237-4306
Meet: East Bay Library, East Lake Square
Mall
Day: 2nd Wed. Time: 7PM
Dues: \$10/yr
CPU: Atari 8-bit and ST/Mega/TT
Misc: Monthly software & peripherals classes

GEORGIA

Middle GA AUG
Rt. 1 Box 362M4 Carl Sutton Rd
Lizella, GA 31052
Jeff Vincent (912) 836-3852
Meet: Warner Robins Public Library
Day: 2nd Sun. Time: 1PM
Dues: \$30/yr and \$4/year optional newsletter
CPU: ST/Mega/TT
Misc: Club library use is free to all paid
members. Participates in annual show
at local mall.

ST Atlanta Roundtable
3069 N. Brook Rd.
Chamblee, GA 30341
Rick Ostapower (404) 487-4845
Day: 3rd Mon.
Dues: \$30/yr
CPU: ST/Mega/TT

ILLINOIS

Champaign-Urbana ST User Group
PO Box 3442
Champaign, IL 61826-3442
Lee Johnson (217) 356-7916
Meet: Urbana Free Library Auditorium, corner
of Elm and Race, Urbana, IL.
Day: 2nd Wed. Time: 7PM
Dues: \$16/yr
CPU: ST/Mega/TT
Misc: AtariUser magazine, PD library access,
December MIDI concert/demo.

Eastside AUG

2425 Crislisa Dr.
Alton, IL 62002
Hank Vize (618) 465-0342
Meet: Alton Square Mall Community Room,
Alton, IL.
Day: 1st Mon. Time: 7PM
Dues: \$18/yr newsletter membership
CPU: Atari 8-bit and ST/Mega/TT
BBS: Eastside (618) 254-6077, Garage (618)
344-8466
Misc: EAUG-Log club newsletter Member of
Midwest Atari Regional Council
consortium

Galesburg AUG

55 Herring St.
Galesburg, IL 61401
Russ Watson (309) 343-6609
Meet: Community Center on Simmons St. in
Galesburg, one block south of
downtown.
Day: 2nd Mon. Time: 7PM
Dues: \$10/yr family, \$5/yr student
CPU: Atari 8-bit and ST

Lake County ACE

PO Box 8788
Waukegan, IL 60079-8788
Mike Brown (708) 336-1128
Meet: Warren-Newport Public Library, 244
O'Plain Rd., Gurnee, IL.
Day: 2nd Sat. Time: 11AM-3PM
Dues: \$20/yr
CPU: Atari 8-bit and ST/Mega/TT
BBS: Python (9600) (708) 680-5105,
Pegasus (708) 623-9570
Misc: Sponsored Midwest AtariFest (Apr.
'90), ChicagoFest (Nov. '90) and the
recent ChicagoFest by Atari (Nov. '91).

Rockford ACC

5430 N. 2nd St.
Loves Park, IL 61111
Cal Schafer (815) 633-1259
Meet: Springbrook Congregational Church, off
Alpine just as you make the turn onto
Springbrook Rd. from Spring Creek
Rd., Rockford, IL.
Day: 3rd Sat. Time: 9AM-Noon
CPU: Atari 8-bit and ST/Mega/TT
BBS: (815) 226-2388

Suburban Chicago ATarians

PO Box 72266
Roselle, IL 60172
Meet: College of Dupage, Student Resource
Center on Lambert Rd. between
Roosevelt and Butterfield, Glen Ellyn,
IL.
Day: 1st Sat. (check BBS) Time: 10AM
Dues: \$20/yr family
CPU: Atari 8-bit and ST/Mega/TT
BBS: SCAT (708) 231-7227

ST Atari Resource

329 Sumter Drive
Belleville, IL 62221
Dennis Guthrie (618) 235-7871
Meet: Illinois Power Bldg., 1050 West Blvd.,
Belleville, IL.
Day: Last Mon. Time: 7PM
Dues: \$15/yr
CPU: ST/Mega/TT

INDIANA

Atari Computer Owners Resource Network
3627 Iowa Court
Fort Wayne, IN 46815
Meet: Shawnee Branch of the Allen County
Public Library
Day: 1st Sat. Time: 10AM-1PM
Dues: \$18
CPU: Atari 8-bit and ST/Mega/TT
BBS: (219) 744-1396 3/12/24/9600
Misc: Three Rivers Festival, PentaCon, ICE
Kid's Conference Participant.

Calumet Region Atari Group
PO Box 10995
Merrillville, IN 46411
Randy Noak (219) 663-6912
Meet: Broadway Music, Greentree Plaza,
1509 W. 81st (US-30), Merrillville, IN.
Day: 2nd Wed. Time: 7PM
Dues: \$15/yr
CPU: ST/Mega/TT
Misc: ST disks \$2.50 each for members, \$4
non-members

KANSAS

Fort Leavenworth Atari Group
4016A 10th Ave.
Leavenworth, KS 66048
Jim Muri (913) 651-0600
CPU: Atari 8-bit and ST/Mega/TT

KENTUCKY

Atari Exchange of Louisville
PO Box 34183
Louisville, KY 40232
Lawrence Estep (812) 944-8997
Meet: Central Jefferson County Government
Center, 7201 Outer Loop
Day: 2nd Sat., 8bit SIG: 1st Wed., ST SIG:
4th Wed. Time: 11:30AM/SIGS:
7:30PM
Dues: \$20/yr per family
CPU: Atari 8-bit and ST/Mega/TT
BBS: Atari Scene! (502) 456-4292
Misc: Subscribe to AELien Transmissions
newsletter (6 issues) for \$1.74/yr.

Bluegrass Region ACE

151 Todds Rd. #240
Lexington, KY 40509
Hal Nason (606) 269-8989
Meet: Conference Room B, Lexington Free
Public Library, Downtown Branch
Conference Room B
Day: 3rd Tue. Time: 7-9PM
Dues: \$15/individual, \$20/family,
\$10/associate
CPU: Atari 8-bit and ST/Mega/TT
Misc: Associate membership includes AIM
but not library access.

LOUISIANA

Calcasieu Atari ST Enthusiasts
314 W. Claude St.
Lake Charles, LA 70605
Tim Bowles (318) 477-3243
Meet: College Park Nazarene Church, 340 E.
Prien Lake Rd., Lake Charles, LA
Day: Last Sat. Time: 1PM
Dues: \$15/yr
CPU: ST/Mega/TT
BBS: General Store (14.4K baud) (318) 855-
6939

MASSACHUSETTS

Western Mass AUG
285 Gates St.
Palmer, MA 01069
David Scarpa (413) 283-4171
Meet: Chicopee Public Library Main Branch,
Front St., Chicopee, MA
Day: 1st Wed. Time: 7PM
Dues: \$20/yr
CPU: Atari 8-bit, ST/Mega/TT and Portfolio
BBS: WMAUG Junction (413) 283-4967

MICHIGAN

Cascade ACE
PO Box 6161
Jackson, MI 49204
CPU: Atari 8-bit, ST/Mega/TT and IBM



Genesee Atari Group
PO Box E
Flint, MI 48507
Jerry Cross (313) 736-4544
Meet: GMI Institute Rm 817A, corner of
Chevrolet and 3rd Ave, Flint, MI
Day: 2nd Wed. Time: 6:30PM
Dues: \$15/yr
CPU: Atari 8-bit and ST/Mega/TT
BBS: FACTS (9600) (313) 736-3920,
Carnival (313) 235-0158, Nine Planes
(313) 233-6095
Misc: Helped sponsor 1987 MAGIC show and
1989 WOA Detroit show

Great Lakes Atari ST Support
PO Box 99737
Troy, MI 48099

Grand Rapids Atari Systems Supporters
624 Dickinson SE
Grand Rapids, MI 49507
Meet: Wyoming Public Library, 3350 Michael
S.W., Grand Rapids, MI.
Day: 1st Wed. Time: 7PM
Dues: \$22/yr
CPU: Atari 8-bit

Michigan ACE
PO Box 2785
Southfield, MI 48037
Meet: Southfield Civic Center, Room 115, at
10-1/2 Mile and Evergreen, 1/2 mile
south of the Evergreen exit on I-696.
Day: 3rd Tue. Time: 7:30PM
Dues: \$20/yr
CPU: Atari 8-bit and ST/Mega/TT
Misc: Send \$2 for current ST or 8-bit disk
catalog.

SALSA
PO Box 1342
Sault Ste. Marie, MI 49783
Roger Aube (705) 759-3922

Saginaw/Tri-Cities Atari User Group
4765 N. Eastman Rd.
Midland, MI 48640
Bryant LaFreniere (517) 835-2234
Meet: Rudy Zauel Memorial Library, corner of
Center and Shattuck in Saginaw
Township.
Day: 2nd Sat. Time: 9AM
Dues: \$20/yr
CPU: Atari 8-bit and ST/Mega/TT
Misc: Free PD disk with
membership/renewal, PD disks are \$3
or 2 for \$5. Participates in Community
Fair at Fashion Square Mall each
January

Washtenaw AUG
14 Payeur
Ann Arbor, MI 48108
Dave Brzezinski (313) 971-3927
Meet: Michigan Student Union on State at S.
University in Ann Arbor.
Day: 2nd Tue. Time: 7:30PM
Dues: \$15/yr
CPU: Atari 8-bit, ST/Mega/TT, Macintosh and
Portfolio
BBS: MOlin's Den (313) 451-0524
Misc: Monthly 8-bit and ST raffle, free ticket
for members, SX212 modem available
for loan.

MINNESOTA

Ports ACE
4835 Crosley Ave.
Duluth, MN 55804-1219
Tracy Hendershot (218) 525-1058
Meet: Duluth Radisson Hotel, check local
BBSes for exact location.
Day: 3rd Sun. Time: 6:30PM
Dues: \$30/yr or \$9/quarter

CPU: Atari 8-bit and ST/Mega/TT
Misc: Newsletter, free ST/8-bit disk, free
printer ribbon reinking, free copying of
ST/8-bit PD libraries.

MISSOURI

ACE of St. Louis
12100 Spanish Blvd
St. Louis, MO 63138
Nick Barr (314) 741-1505
Meet: Thornhill Branch Library, Maryland
Heights, MO.
CPU: Atari 8-bit and ST/Mega/TT
Misc: Club newsletter

Midwest STar
1107 W. 88th St.
Kansas City, MO 64114
Gary Leach (913) 236-9643
CPU: ST/Mega/TT

MONTANA

Rattlesnake ACE
Box 364
Frenchtown, MT 59834
Tom Tucker (406) 626-4410
Meet: National Guard Armory, 2501 Reserve
St., Missoula, MT.
Day: 3rd Sun. Time: 7PM
Dues: \$16/year
CPU: Atari 8-bit and ST/Mega/TT
Misc: Membership includes free PD disk.

NORTH CAROLINA

Raleigh ACE
4360 Hunters Club Dr.
Raleigh, NC 27606
Lewis Midyette (919) 828-4319
Meet: Announced on Galaxy BBS, look under
Bulletins for "A word from the president
of RACE"
CPU: Atari 8-bit and ST/Mega/TT
BBS: Galaxy (919) 552-0974

NORTH DAKOTA

Minot Atari Computer Users Group
129-2 Sirocco Dr.
Minot AFB, ND 58704

NEBRASKA

Omaha ACEs
PO Box 723
Papillion, NE 68046
Pete Killian (402) 592-5427
Meet: La Vista Recreation Center, 8116
Parkview Blvd. (just off 84th St., south
of Food-4-Less and east of 84th at the
light.)
Day: 2nd and Last Wed. (exc. Nov. & Dec.)
Time: 7:30PM
CPU: Atari 8-bit and ST/Mega/TT

NEW JERSEY

Jersey Atari Computer Society
PO Box 710
Clementon, NJ 08021
Mike Hopkins (609) 783-1423
Meet: Camden County Library
Day: 3rd Tue. Time: 7-9PM
Dues: \$24/yr (August renewal)
CPU: Atari 8-bit and ST/Mega/TT
BBS: (609) 346-1224
Misc: Between Bytes newsletter, AtariUser
available at meetings Send SASE
(business size) for copy of current ST
or 8-bit disk catalog.

NEW MEXICO

Albuquerque ACE
1021 Sagebrush Trail SE
Albuquerque, NM 87123
Richard Houser (505) 299-3977
Meet: Gas Company of New Mexico. 4625
Edith Blvd, Albuquerque.
Day: Gen: 1st Sat and 3rd Tue., 8bit: 2nd
Tue.
Dues: \$20/yr payable in January

CPU: Atari 8-bit and ST/Mega/TT
BBS: Astro (505) 260-0448
Misc: PD library access, BBS membership.
Swap meet on 1st Sat. of June and
December.

NEW YORK

Atari Computer Owners of Rochester NY
PO Box 24920
Rochester, NY 14624
Don Allis (716) 293-3415
Meet: Brighton HS, 1150 Winton Rd. South,
Room 262S.
Day: 2nd Wed. Time: 7PM
Dues: \$20/yr (add \$6 for AIM)
CPU: Atari 8-bit and ST/Mega/TT
BBS: Dimension's End (716) 436-3078
3/12/2400
Misc: ACORN Kernel newsletter, AtariUser,
extra BBS access. ST Beginners and 8-
bit Basically Speaking classes held
before general meeting.

Buffalo Region Atari Group for STs
PO Box 1035
Buffalo, NY 14225
Mark Pierro (716) 691-7844
Meet: Erie Community College, North
Campus, Room S-105 in the Student
Center.
Day: 3rd Thu. Time: 7:30PM
CPU: ST/Mega/TT
Misc: Monthly raffle. Board of Directors, 1st
Thurs. at Your Host Restaurant, Harlem
at Sheridan, 7PM.

Capital District ACE
PO Box 1910
Schenectady, NY 12301
Bob Thompson (518) 439-5356
Meet: Computer Cellar in the Westgate Plaza,
Albany, NY.
Day: ST: Last Wed., XL/XE: Qtrly. Time:
6:30PM
Dues: \$20/year
CPU: Atari 8-bit and ST/Mega/TT
Misc: ST disks \$2, free XL/XE library access.

Long Island AUG
PO Box 92
Islip, NY 11751
John Aalto (516) 589-6754
CPU: Atari 8-bit and ST/Mega/TT
BBS: STar Scan (516) 399-4252

Ol' Hackers AUG
3376 Ocean Harbor Dr.
Oceanside, NY 11572
Alex Pignato (516) 678-6081
Meet: Plainview-Old Bethpage Library, 999
Old Country Rd. in Plainview
Day: Usually 2nd Sat.
Dues: \$24/yr
CPU: Atari 8-bit ONLY!
Misc: Charter member of NEAR*US user
group consortium.

Western NY AUG
PO Box 59
Buffalo, NY 14216
Mike Husband (716) 825-8486
Meet: Room 116E, Bacon Hall, State
University College of Buffalo, 1300
Elmwood Ave.
Day: 1st Thu. Time: 7:30PM
Dues: \$15/yr new, \$12/yr renewal
CPU: Atari 8-bit
BBS: Wizard's Attic (716) 681-1654
Misc: POKEY newsletter disk

OHIO

ACC of Toledo
4487 289th
Toledo, OH 42611
Dave & Brenda Micka (419) 729-1891
Meet: Dave & Brenda Micka's home.

Day: 1st Wed. Time: 7-9PM
CPU: Atari 8-bit and ST/Mega/TT
BBS: Disk Drive-Thru BBS, (419) 885-3441
Misc: Disks \$2 8-bit, \$4 ST

ACE of Columbus
1287 Dennison Ave.
Columbus, OH 43201
Anthony Ramos

Cuyahoga Valley ACC
PO Box 9173
Akron, OH 44305
Don Crano (216) 376-7618
Meet: First National Bank, Mogadore, OH.
Day: 2nd & 4th Tue. Time: 7:30PM
Dues: \$20 family
CPU: Atari 8-bit and Mega/ST/TT
Misc: Discounts at local computer stores,
club newsletter The Password

Mid-Ohio AUG
PO Box 134
Ontario, OH 44862
Chuck Steinman (419) 529-2478 after
5PM
Meet: A&B Computers, 1151 Park Ave. W.,
West Park Shopping Center, Mansfield,
OH.
Day: 3rd Sat. (exc. July) Time: 7-9PM
Dues: \$12/yr
CPU: Atari 8-bit and ST/Mega/TT
BBS: DataQue (419) 529-5197 3/12/2400
Misc: Members can access AIM ST and 8-bit
disk files on the BBS. AtariUser
available free to members at A&B.
Back issues of AtariUser available for
\$1 each.

ST Atari North Coast Enthusiasts
1174 Larkspur Dr.
Lyndhurst, OH 44124
Joseph Adato (216) 449-6881
Meet: B&G Electronics, 15729 Madison Ave.,
Lakewood, OH.
Day: 3rd Mon. Time: 7:15PM
Dues: \$12/yr with one time sign up fee of \$13
CPU: ST/Mega/TT

OKLAHOMA

Tinker ACE
16564 SE 18th
Choctaw, OK 73020
Ron Hamilton (405) 387-5649
Meet: Moore Public Library, 225 S. Howard,
just off SW 4th and I-35, Moore, OK.
Day: 1st Sat. Time: 1PM
Dues: \$15 family, \$7 correspondence (July
renewal)
CPU: Atari 8-bit and ST/Mega/TT
BBS: TACE (405) 366-1977
Misc: Will mail copies of AtariUser magazine
to individuals for approx. \$1 per issue.

OREGON

Atari Computer Users Network
2662 E. Nob Hill Dr. SE
Salem, OR 97302
Ron Purdy (503) 588-7509
Day: 4th Tue. Time: 7PM
Dues: \$15 with AIM, \$10 without
CPU: Atari 8-bit and ST/Mega/TT
BBS: Salem Public Lib. (503) 588-6130,
Page (503) 363-0171, The Jungle (503)
393-4274.

Central Oregon Atari Club
PO Box 6824
Bend, OR 97708
Aaron Leis (503) 388-7516
Meet: Ann Rita Conference Center (in front of
the St. Charles Hospital on Neff Rd.),
Bend, OR.
Day: 1st Sat. Time: 5PM
Dues: \$20/yr new, \$17/yr renewal, \$1/yr for
each additional family member.
CPU: Atari 8-bit and ST/Mega/TT

Douglas County Atari ST Enthusiasts
1033 Barager
Roseburg, OR 97470
Jim Steingrobe (503) 673-1687
CPU: Atari ST/Mega/TT

Portland Atari Club
PO Box 1692
Beaverton, OR 97005
David Hunt (503) 286-6276
CPU: Atari 8-bit and ST/Mega/TT
BBS: ACE of America (503) 285-4417

PENNSYLVANIA

Nittany Atari Personal Computer Organization
642 E. Waring Ave.
State College, PA 16801
Greg Brown (814) 238-4255
CPU: Atari 8-bit and ST/Mega/TT

Philadelphia ACS, Atari 8-bit SIG
Box 312, LaSalle Univ.
Philadelphia, PA 19141
Meet: Drexel University, Room M11B,
Matherson Blvd., 32nd and Market St.,
Phil., PA.
Day: 3rd Sat.
Dues: \$25/year with an additional \$2 for new
members.
CPU: Atari 8-bit
BBS: (215) 942-9600 to 9604 (9603/4 for 300
baud)
Misc: The DataBus newsletter, AtariUser

Spectrum Atari Group of Erie
PO Box 10562
Erie, PA 16514-0562
Dennis McGuire (814) 833-4724
Meet: St. John's Lutheran Church, Erie, PA.
Day: 3rd Sun. Time: 2PM
CPU: Atari 8-bit and ST/Mega/TT

Southcentral Pennsylvania ACE
PO Box 11446
Harrisburg, PA 17108
John Slade (717) 938-3656
Meet: Camp Hill Mall Community Room
Day: 3rd Mon. Time: 7:30PM
Dues: \$15/yr
CPU: Atari 8-bit and ST/Mega/TT
Misc: SPACE Probes newsletter

Westmoreland Atari Computer Organization
230 Clairmont St.
North Huntingdon, PA 15642
Patty Marshall (412) 225-8637
Meet: North Huntingdon Town House, near
Irwin, PA.
Day: 2nd Tue.
Dues: \$24 family
CPU: Atari 8-bit, ST/Mega/TT, Mac, IBM and
Portfolio
Misc: Huge foreign PD libraries. Participates
in many Atarifests in the northeast.

SOUTH DAKOTA

Rushmore ACE
9512-A Adams
Ellsworth AFB, SD 57706
Rick Burton (605) 642-5353
Meet: Rapid City Public Library
Day: 4th Sat. Time: 2PM
Dues: \$12 basic, \$15 newsletter
CPU: Atari 8-bit and ST/Mega/TT

TENNESSEE

Cookeville ACE
280 Capshaw Drive
Cookeville, TN 38501
Dan Hale (615) 526-8002
Meet: Putnam County Library, Cookeville, TN.
Day: 1st Sat. Time: 1PM
Dues: \$10
CPU: Atari 8-bit and ST/Mega/TT
BBS: Generic BBS (615) 432-5809

Memphis Atari Systems Hobbyists
3265 Austin Peay Hwy.
Memphis, TN 38128
Randy McKinna (901) 388-3384
Meet: State Technical Institute in the Fulton
Auditorium.
Day: 2nd Mon. Time: 7PM
Dues: \$24/yr (renewal in July)
CPU: Atari 8-bit and ST/Mega/TT
BBS: MASH COM (901) 377-1904 3/12/24

Nashville AUG
PO Box 121752
Nashville, TN 37221
Walt Sullivan (615) 228-7353
Meet: Cumberland Museum and Science
Center
Day: 3rd Thu. Time: 7-10PM
Dues: \$24/yr full; \$12/yr associate
CPU: Atari 8-bit and ST/Mega/TT
BBS: Nashville Exchange (615) 383-0727
3/12/24/9600 Troll's Cave (615) 872-
0757 12/2400

TEXAS

Alamo Area Atari User Association
PO Box 79-1426
San Antonio, TX 78279
Al Sherrill (512) 492-6633
Meet: Balcones Heights Community Center,
107 Glenarm, San Antonio, TX. 107
Glenarm, San Antonio
Day: 1st Tue. Time: 6:30-9:30PM
Dues: \$24; Subscribing: US-\$16, CAN/MEX-
\$36 (\$14 no AIM), Other-\$54 (\$18 no
AIM)
CPU: Atari 8-bit
Misc: Library of around 700 disks. (FR)ANTIC
monthly newsletter. Swap meet and
computer workshop each 3rd meeting.

Austin ACE
1601 Larkwood Dr.
Austin, TX 78723
Eve Kuniansky (512) 323-2016
Meet: Library. Pizza buffet 1st Thursday of
each month 6:30-8PM.
Day: 2nd Sat. Time: 2-5PM
Dues: \$24/yr Jan-Dec
CPU: Atari 8-bit, ST/Mega/TT, Portfolio and
Lynx
Misc: Newsletter, C classes, library access.

ACC of El Paso Texas
245 Longhorn Court
El Paso, TX 79907-5215
Steve Bruck (915) 858-1117
Dues: \$20
CPU: Supports Atari 8-bit, ST/Mega/TT,
Macintosh and IBM
BBS: STEP, (915) 755-STEP STE-EP BBS,
(915) 821-9220
Misc: Discounts from Jenkins' Computers,
special STE-EP access.

Golden Triangle AUG
2508 San Jacinto
Beaumont, TX 77701
Carl Neblett (409) 755-6535
Day: 1st Tue.
Dues: \$24/yr (Sept. renewal)
CPU: Atari 8-bit, ST/Mega/TT, Macintosh,
IBM, MIDI
BBS: (409) 722-6526

Houston ACE
PO Box 460212
Houston, TX 77056
Bill Kithas (713) 855-0815
Meet: Health Economics Corp., 2400 West
Loop S., Houston, TX.
Day: 4th Wed. Time: 6:45PM
Dues: \$22/year
CPU: Atari 8-bit, ST/Mega/TT
BBS: (713) 458-9923
Misc: UPDATE ATARI newsletter, store
discounts, door prizes, workshops.

ST Atari League of San Antonio
 PO Box 18731
 San Antonio, TX 78218-0731
 Tim Hebel (512) 656-5315
Meet: Balcones Heights Community Center,
 710 Glenarm, San Antonio, TX.
Day: 2nd Tue. Time: 7-10PM
Dues: \$20 w/AIM, \$15 regular
CPU: ST/Mega/TT
Misc: Club newsletter, discounts, Disk of the
 Month for \$2, New user classes.

UTAH

Layton ACE
 3897 S. 2275 W.
 Roy, UT 84067-3515
 Irwin Brooks (801) 731-1516
Meet: Clearfield Library basement, Roy, UT.
Day: 2nd Wed. Time: 7PM
Dues: \$20/yr
CPU: Atari 8-bit and ST/Mega/TT

ST Users Network
 PO Box 27285
 Salt Lake City, UT 84127
 Randy Larsen (801) 967-0209
Meet: Murry High School
Day: 3rd Wed. Time: 7PM
CPU: ST/Mega/TT
BBS: The Bolt (801) 968-3921

WASHINGTON

First ACC of Spokane
 PO Box 5121
 Spokane, WA 99205
 Tim Osborne (509) 624-1917
Meet: Eager Beaver Computers, next to the
 Garland Theatre, Spokane, WA.
Day: 2nd Thu. Time: 7PM
Dues: \$15/yr family
CPU: Atari 8-bit and ST/Mega/TT

Starbase Atari User Group
 8307 27th NW
 Seattle, WA 98117
 Steve Drake (206) 782-3691
Meet: Mountlake Terrace Library, 23300 58th
 Ave West, Mountlake Terrace, WA.
Day: 2nd Fri. Time: 6PM
Dues: \$18/yr
CPU: Atari 8-bit and ST/Mega/TT

Southwest Washington Atari Group
 PO Box 1515
 Vancouver, WA 98668
 Allan Coker
Meet: Clark County Fire District #5, Station 3
 on 213 NE 120th, Vancouver, WA.
Day: Last Sun. (exc. July) Time: 6:30PM
Dues: \$12/yr
CPU: Atari 8-bit and ST/Mega/TT
BBS: Bear Cavern (206) 574-1146

WISCONSIN

MilAtari Ltd.
 PO Box 14038
 West Allis, WI 53214
 Lee Musial (414) 466-7557
Meet: Greenfield Park Lutheran Church, 1236
 S. 115th St.
Day: 3rd Sat. Time: Noon
Dues: \$22/yr
CPU: Atari 8-bit and ST/Mega/TT
Misc: MilAtari hosts the Computer Gaming
 area at GEN-Con each year.

CANADA—ONTARIO

Kent AUG
 153 Oxley Dr.
 Chatham, Ontario N7L 4R3 CANADA
 Channel One Computers (519) 351-
 0760
Meet: North Maple Village Mall on Highway
 #40, just north of Chatham.
Day: 4th Tue., Sept-May
Dues: \$20/yr
CPU: Atari 8-bit and ST/Mega/TT
BBS: KAUG (519) 351-3901

National Capital AUG
 15 Blueridge Court
 Nepean, Ontario K2J 2J3 CANADA
 Hardy Zeltins (613) 825-4196
CPU: Atari 8-bit, ST/Mega/TT, Macintosh
Thunder Bay Atari ST Enthusiasts
 185 Varsity Row
 Thunder Bay, Ontario P7B 5P2
 CANADA
Dues: \$25/yr Canadian
CPU: ST/Mega/TT

Windsor AUG
 3199 McKay Ave.
 Windsor, Ontario N9E 2R4 CANADA
 Brian Cassidy (519) 966-0305
Meet: Roseville Gardens Community Centre,
 4200 Roseville Garden Dr., Windsor,
 Ontario, Canada.
Day: 3rd Thu. Sept-June, exc. Dec. (2nd
 Thu.) Time: 7:30PM
Dues: \$25 Canadian
CPU: Atari 8-bit and ST/Mega/TT

CANADA—QUEBEC

Atari ST/Mega Users of Montreal
 PO Box 966, Station B
 Montreal, PQ H3B 3K5 CANADA
 Kest Carter-Morgan (514) 272-6631
CPU: ST/Mega/TT, MIDI Specialists
Misc: Emergency repair, laser printing &
 graphics services, discounts on
 computer and MIDI equipment, Audio
 Recording & Music Tech course
 discounts and MUCH MORE!
Montreal Atari Club Atari de Montre'al
 PO Box 5418
 St. Laurent, PQ H4L 4Z9 CANADA
 Terry Cowen (514) 696-3773
Meet: Monkland Recreational Centre, 4410
 West Hill, N.D.G., Montreal, Quebec.
Day: 8-bit: 1st Thu., ST: 3rd Thu.
Dues: \$25 8-bit, \$30 ST, \$35 both (Canadian)
CPU: Atari 8-bit and ST/Mega/TT
Misc: Disk-based newsletter, free AIM disk
 access, AtariUser magazine

ENGLAND

Bournemouth and Poole AUG
 248 Wimborne, Oakdale
 Poole, Dorset BH1S 3EF ENGLAND
Day: 1st Fri. Time: 7:30PM
CPU: Atari 8-bit and ST/Mega/TT
Misc: 8:16 Newsletter

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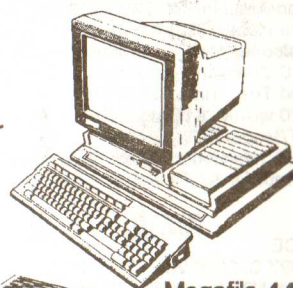
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 SC1224 (12" Color) 249.00
 PTC1426 Multi-Sync 479.00

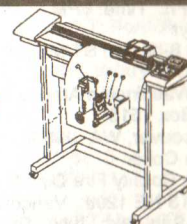
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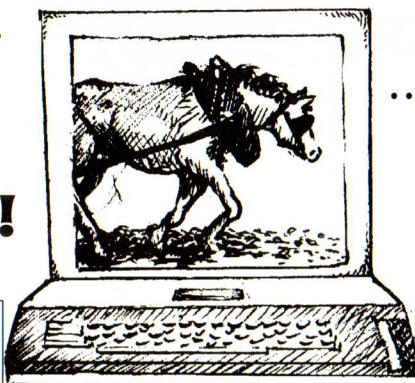
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Make your 8-bit a Workhorse!



...with power products from
**Computer Software
Services**

Power Products for your
XF551

Power products for your XL/XE computer

\$69.95

THE ULTRA SPEED PLUS OS

\$69.95

\$99.95 THE XF SINGLE DRIVE UPGRADE \$99.95

Double the storage capacity of your XF551 with our 3.5" 720k **single drive upgrade!** Included with the upgrade is a Sony 3.5" disk drive in a 5.25" faceplate that perfectly replaces the existing 5.25" drive. The 3.5" drives are newer technology, more reliable, and easier to handle. Do NOT confuse this with public domain upgrades! The completely re-written drive OS adds these features:

- **Fixes incompatibilities** with commercial software
- **Eliminates density reconfiguring problems**
- Switches to second side without reconfiguring
- **Ultra Speed** I/O compatible
- Very **high speed** sector skew in US mode
- Capable of reading **IBM** and/or **ST** disks
- Compatible with 40 OR 80 track drives

Included with the upgrade is a utility program capable of reading IBM and/or ST disks, so you can import text or binary files to your 8-bit (text conversion routines are included). Minimal soldering is required, but we provide free installation for any of our products! Only \$99.95 plus \$8 S/H/I. If you already have a 3.5" drive, you may obtain the single drive upgrade without the Sony drive for \$59.95 plus \$5 S/H/I.

\$139.95 THE XF DUAL DRIVE UPGRADE \$139.95

Our XF Dual drive upgrade allows you to **add** a 3.5" drive to your XF551, while keeping the 5.25" mechanism. This is a totally **switchless** upgrade that turns your XF into two disk drives! The added 3.5" drive assumes the next drive number higher than the 5.25" and is totally independent, so you can copy between drives, even mixing densities! This product has all of the features of the above single drive upgrade, available for **both** drives! Complete with Sony 3.5" drive, only \$139.95 plus \$8 S/H/I. The upgrade without the drive is \$79.95 plus \$5 S/H/I. A special version to handle dual 3.5" mechanisms is available for an additional \$20.

THE FLOPPY BOARD \$109/149

The Floppy Board has arrived! This long-awaited Black Box add-on has been in the making for quite a while, but we've packed it with features that are worth the wait! This sophisticated device allows connection of up to four 5.25" or 3.5" floppy drives (drive sizes may be mixed). Access to these drives will be at parallel bus speed, approaching that of hard disks!

The board consists of 13 special integrated circuit chips, fully powered by the power supply of the Black Box. It has its own on-board microprocessor to take the load off the computer's processor for disk I/O. The board and fits perfectly over the Black Box (inside the custom cases!). It is not a stand-alone device; it must be used in conjunction with the Black Box.

High density disks are supported, so 1.2 meg 5.25" and 1.44 meg 3.5" drives may be connected. This is the only 8-bit controller to fully support these drives and densities! With four 3.5" 1.44 meg drives connected, you can achieve more total storage than a 5 meg hard disk! Archiver compatibility is supported! This means you can back up those titles no longer available. Although it's not as powerful as our Super Archiver, it will have the same editing power, with good backup capability.

Software included with the Floppy Board includes a utility to READ and WRITE IBM and ST disk formats! This will yield the easiest possible way to port text and data files between your 8-bit and ST or PC! This will be compatible with most all of the current formats. Also included is a high-speed sector copier designed to make extremely fast, verified copies of disks. A future upgrade to the Hard Drive Pro Backup (our hard disk backup tool) will make special use of the floppy board, and squeeze even more data on each disk than standard formats allow. It is possible to actually store 1.6 megs of data on a 1.44 meg 3.5" drive, so backing up a full 20 meg hard disks might only take 14 disks! Usage of the Floppy Board's on-board processor will allow overlapping reading and writing, making the backup really fly.

Two versions are available: the basic unit, and the Deluxe version. The basic unit provides the interface necessary for low density drives (360k for 5.25" and 720K for 3.5"), and comes with the IBM/ST transfer utility. The Deluxe version adds the high density capability, adds Archiver compatibility, AND adds the features of the Black Box Enhancer, which include a high-resolution 16 grey scale printer screen dump, and a powerful built-in sector editor, disassembler, and copier (which accesses the full 16 megs possible of hard disk partitions, and uses all available extra memory). Note: the Floppy Board replaces the ROM on the Black Box, so current Black Box Enhancers cannot be used with the Floppy Board.

The basic unit is only \$109.95, and the deluxe unit is only \$149.95. Add \$5 for shipping/handling.

The Operating System that should be in every XL/XE computer! The **ULTRA SPEED PLUS** puts unbelievable speed and convenience at your fingertips. After using it a while, you'll wonder how you ever got along without it! Use **ANY DOS** to place **ULTRA HIGH SPEED** formats on your disks (with XF551 or modified 1050 drives), reconfigure and boot any drive (1-9 or even your **RAMDISK!**), sector copy single and double density disks to your **RAMDISK**, activate a built-in **400/800 OS** for compatibility, and much more! Below are a list of features. Only \$59.95 + \$5 S/H/I.

- **ULTRA SPEED SIO** for most modified drives
- **ULTRA SPEED** is toggleable
- Boot directly from **RAMDISK**
- Special timer circuits not required for 1 and 2 megs
- Background colors adjustable
- Reverse use of **OPTION** key
- Toggle internal **BASIC**
- Built-in drive number editor (including **RAMDISK** drive)
- Toggle screen off for up to 40% increase in speed
- **DOUBLE DENSITY RAMDISK** handlers
- **ENTIRE MEMORY TEST** that pinpoints defective RAM chips
- Boot any drive (1-9) on cold start
- Supports ALL XE-compatible memory upgrades up to **two megabytes**
- **THREE** Operating Systems in one (**XL/XE, 400/800, ULTRA SPEED PLUS**)
- **COLD-START** without memory loss
- Built-in mini sector copier
- **RAMDISK** exactly duplicates floppy drive so sector copying and editing are possible

\$199.95

THE BLACK BOX

\$199.95

The **BLACK BOX** is a parallel-port device for your XL or 130XE computer that adds tremendous power to your 8-bit Atari. It is a T-shaped board with two buttons, two switches, and a set of dip switches visible from the outside. The **BLACK BOX** performs three main tasks: interface to a SASI/SCSI bus (for interface to most common hard disks), a parallel printer port, and a RS232 (modem) port. You may partition your hard disk(s) into as many drives as you wish; up to 9 may be active at any given time. By pressing one of the buttons on the **BLACK BOX**, you will enter the configuration menu, where you can re-assign drive numbers, swap partitions in and out, etc. When you exit, you will be returned to your program - undisturbed! Each hard disk partition has its own write-protect flag, and may be set to single or double density. Every hard disk may be write-protected with the flip of a switch. As an option, you may use your computer's XE RAM as a printer buffer, or order the **BLACK BOX** with 64K of on-board RAM. Another amazing feature of the **BLACK BOX** is the built-in **screen dump**. By simply pressing a button, the contents of your screen will be dumped to your printer! (You can define text or graphics modes with a switch!) The RS232 port supplies the full spec signals for added compatibility. Its handler takes up no user memory, and can handle 19,200 BAUD! A **machine language monitor** has been added to allow memory disassembly, memory/register changes, and more. The basic **BLACK BOX** unit is \$199.95, and \$249.95 with 64K RAM (for printer spooler). S/H/I is \$8. An optional custom **BLACK BOX** case is available for \$39.95. The Black Box is a product of Computer Software Services... Not the Black Box Corporation.

HARD DISK SYSTEMS

We offer complete, ready-to-run hard disk systems from 5 megs on up! These systems include a hard disk, Black Box, power supply, controller, cables, and software. Everything is pre-formatted and tested, so all you have to do is plug it in and boot! Prices start as low as \$399. Call for the latest prices and specials!

INSTALLATION AND REPAIRS

Although installation of any of our products is easy, by taking advantage of our free installation offer, you can rest assured it will be done right. All you pay is the freight charges. For repair of Atari 8-bit computers and drives at reasonable rates, contact our repair department at (716) 429-5639. All work is guaranteed, and there are no minimum estimate fees.

TWO FOR ONE DEAL!

If you have two or more of the same items needing repair and don't want to spend any money... send them to us and we'll use the parts from both defective items to make one good working unit at NO CHARGE - we'll keep the other defective one for parts! Please call before sending anything in.

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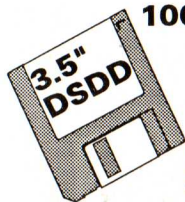
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DISKETTES

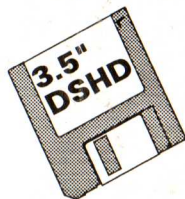
GENERIC PREMIUM

100% GUARANTEED - ENVELOPES FREE - LABELS \$1.00 PER 100



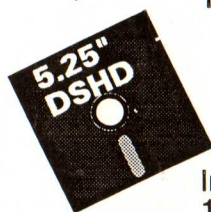
33 ¢ ea.

In bulk packs of 50
Software overruns 31¢ ea.
10 Pak/white box . . . \$3.90



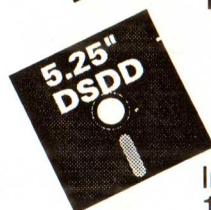
47 ¢ ea.

In bulk packs of 50
10 Pak/white box . . . \$5.90



33 ¢ ea.

In bulk packs of 50
10 Pak/white box . . . \$3.90



18 ¢ ea.

In bulk packs of 1000
10 Pak/white box . . . \$2.30

19 ¢ ea. **20** ¢ ea.
Bulk lots of 500 Bulk lots of 50
10 Pak/white box . . . \$2.50

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5.25"DD - 13¢ ea.
5.25"HD - 25¢ ea.

12 Piece
PC Tool
Kit

Zippered
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5.25"/10 Pak
SRW Disk Case

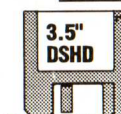
Reg. \$1.65
now **75¢ ea.**
Beige Color



BULK LOTS OF 50 EACH BOXED/LABELED

	Quantity				
	500	100	50	100+	10-90
Blue	.42	.45	.49	.49	.53
Colors	.52	.55	.58	.62	.69

Please refer to color chart.



BULK LOTS OF 50 EACH BOXED/LABELED

	Quantity				
	500	100	50	100+	10-90
Black	.68	.72	.77	.79	.85
Colors	.84	.88	.92	.95	.99

Please refer to color chart.



BULK LOTS OF 50 EACH BOXED/LABELED

	Quantity				
	500	100	50	100+	10-90
Black	.42	.45	.48	.49	.54
Colors	.47	.51	.54	.59	.64

Please refer to color chart.



BULK LOTS OF 50 EACH BOXED/LABELED

	Quantity				
	500	100	50	100+	10-90
Black	.25	.28	.30	.33	.36
Colors	.30	.33	.38	.38	.41

Please refer to color chart.

PREMIUM COLOR CHART

	Royal Blue	Green	White	Fog White	Grey	Yellow	Orange	Burgandy	Lt. Blue	Dk. Blue	Black
3.5" DSDD	X		X		X	X	X	X			X
3.5" DSHD	X	X	X	X		X	X	X			
5.25" DSDD	X	X	X	X		X	X	X	X	X	X
5.25" DSHD	X	X	X	X		X	X	X	X	X	X

DISKETTES	3.5" CASES		5.25" Cases / Mailers	
	100 cap w/lock	9.00	120 cap w/lock	9.00
	40 capacity	7.00	50 capacity	5.50
	10 capacity	1.65	15 capacity	4.90
	5 capacity	1.65	10 cap smoke	1.65
			10 cap SRW	1.65

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